

FILE 'REGISTRY' ENTERED AT 22:53:04 ON 20 APR 2003

L4 0 S PLO GEL

L5 4 S AZITHROMYCIN/CN OR ERYTHROMYCIN/CN OR ROXITHROMYCIN/CN OR CLA

FILE 'CAPLUS, WPIDS, MEDLINE, PROMT' ENTERED AT 22:54:57 ON 20 APR 2003

FILE 'REGISTRY' ENTERED AT 22:55:24 ON 20 APR 2003

SET SMARTSELECT ON

L6 SEL L5 1- CHEM : 114 TERMS
SET SMARTSELECT OFF

FILE 'CAPLUS, WPIDS, MEDLINE, PROMT' ENTERED AT 22:55:25 ON 20 APR 2003

L7 68778 S L6/BI

L8 342 S PLO GEL# OR PLEURONIC LECITHIN OR ((PLURONIC OR PLEURONIC) (5

L9 1 S L8 AND L7

L10 0 S MACROLIDE# (50A) L8

L11 27212 S STARCH GLYCERITE# OR BENTONITE MAGMA OR EMULSION GEL# OR LUBR

L12 68 S L11 (L) (L7 OR MACROLIDE#)

L13 59 DUP REM L12 (9 DUPLICATES REMOVED)

=> d que 18; d que 111

L8 342 SEA PLO GEL# OR PLEURONIC LECITHIN OR ((PLURONIC OR PLEURONIC)
(5A) (GEL# OR ORGANO GEL#))

L11 27212 SEA STARCH GLYCERITE# OR BENTONITE MAGMA OR EMULSION GEL# OR
LUBRICATING GEL# OR (DIMETHICONE (10A) GEL#) OR (POLOXAMER
(5A) GEL#) OR (METHYLCELLULOSE (3A) GEL#) OR (ALCOHOL? (3A)
GEL#) OR ORGANIC GEL# OR ORGANO GEL# OR ORGANO GEL# OR HYDROGEL#

No good

L9 ANSWER 1 OF 1 PROMT COPYRIGHT 2003 Gale Group

TX **MACROLEX: Solvent-soluble dyes**
for plastics and fibers -- Bayer Corporation,
Industrial Chemicals Division

L13 ANSWER 1 OF 59 PROMT COPYRIGHT 2003 Gale Group

AN 2002:467782 PROMT
TI Chemical tradenames. (Q-Z). (list of chemical companies throughout the world with contact data) (Industry Overview) (Cover Story)
SO Chemical Week, (27 Sep 2002) Vol. 164, No. 38, pp. 497(9).
ISSN: ISSN: 0009-272X.
PB Chemical Week Associates
DT Newsletter
LA English
WC 12518
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB QDO DBQDO: Vulcanizing agents -- Lord Corporation, Chemical Product Division
THIS IS THE FULL TEXT: COPYRIGHT 2002 Chemical Week Associates

Subscription: \$99.00 per year. Published weekly. P.O. Box 7721, Riverton, NJ 08077-9021.

TX TIOVEIL: **Titanium dioxide** for sun screen -- Frank E. Dempsey & Sons Ltd

L13 ANSWER 2 OF 59 PROMT COPYRIGHT 2003 Gale Group

AN 2002:467781 PROMT
TI Chemical tradenames. (F-P). (list of chemical companies throughout the world with contact data) (Industry Overview) (Cover Story)
SO Chemical Week, (27 Sep 2002) Vol. 164, No. 38, pp. 486(12).
ISSN: ISSN: 0009-272X.
PB Chemical Week Associates
DT Newsletter
LA English
WC 18020
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB F-1000, 2000, 2100, 2200, 2300, 3600, 4400: Aluminum hydroxide dried gel
-- Reheis Inc
THIS IS THE FULL TEXT: COPYRIGHT 2002 Chemical Week Associates

Subscription: \$99.00 per year. Published weekly. P.O. Box 7721, Riverton, NJ 08077-9021.

TX HYDROGEL -- Wyo-Ben, Inc
HYDROGEL: Wyoming bentonite -- Wyo-Ben, Inc
HYPAN SA 100H/SS201/QT100/SR150H: **Hydrogel** -- LIPO CHEMICALS INC
MACROLEX: **Solvent-soluble dyes for plastics and fibers** -- Bayer Corporation, Industrial Chemicals Division

L13 ANSWER 3 OF 59 PROMT COPYRIGHT 2003 Gale Group

AN 2002:385349 PROMT
TI Who's who guide to personal care (D - K). (Products: Raw Materials). (company list)
SO Global Cosmetic Industry, (July 2002) Vol. 170, No. 7, pp. 158(18).
ISSN: ISSN: 1523-9470.
PB Allured Publishing Corp.
DT Newsletter
LA English
WC 10199
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB Damar Gum
THIS IS THE FULL TEXT: COPYRIGHT 2002 Advanstar Communications, Inc.

Subscription: \$40.00 per year. Published monthly.

TX Emu Oil
Erythromycin
Erythromycin Stearate
Ethylphenyl Glycidate

L13 ANSWER 4 OF 59 PROMT COPYRIGHT 2003 Gale Group

AN 2003:2430 PROMT
TI Patents.
SO Manufacturing Chemist, (Nov 2002) Vol. 73, No. 11, pp. 53(3).
ISSN: ISSN: 0262-4230.
PB Polygon Media Ltd.
DT Newsletter
LA English
WC 3280
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB patents
THIS IS THE FULL TEXT: COPYRIGHT 2002 Polygon Media Ltd.

Subscription: \$175.00 per year. Published monthly. Tubs Hill House, London Road, Sevenoaks, Kent TN13 1BY., United Kingdom

TX Nitric acid-producing hydrogel materials
Rice University 1194171 *
New use for a macrolide compound for treating
neurodegenerative disorders
Fujisawa Pharmaceutical 1196170 *

L13 ANSWER 5 OF 59 CAPLUS COPYRIGHT 2003 ACS

AN 2002:368254 CAPLUS
DN 136:374945
TI Hydrogel wound dressings
IN Addison, Deborah; Silcock, Derek Walter
PA Johnson & Johnson Medical Limited, UK
SO PCT Int. Appl., 21 pp.
CODEN: PIXXD2

DT Patent
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002038097	A1	20020516	WO 2001-GB4983	20011112
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2002012552	A5	20020521	AU 2002-12552	20011112
PRAI	GB 2000-27674	A	20001113		
	WO 2001-GB4983	W	20011112		
AB	The invention provides a wound dressing comprising: a liq.-permeable top sheet having a wound facing surface and a back surface, said top sheet being adapted to block or restrict passage of liq. from the back surface to the wound facing surface; and an insol. hydrogel layer on the wound facing surface of the top sheet. The hydrogel layer may comprise cellulose derivs., vinyl monomers, polyoxyalkylenes, etc.				
RE.CNT 10	THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD				
	ALL CITATIONS AVAILABLE IN THE RE FORMAT				
IT	Fats and Glyceridic oils, biological studies				

RL: DEV (Device component use); MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(emu, Dromaius novaehollandiae; hydrogel wound dressings)

L13 ANSWER 6 OF 59 CAPLUS COPYRIGHT 2003 ACS
AN 2002:167660 CAPLUS
DN 136:221709
TI Drug formulations with increased bioavailability containing hydrogel-copolymers
IN Luftenstein, Christian-Peter; Brunner, Anette; Reimholz, Ralph; Wermuth, Jochen; Gehrman, Thomas
PA Aventis Research & Technologies GmbH & Co Kg, Germany
SO Ger. Offen., 6 pp.
CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10040592	A1	20020307	DE 2000-10040592	20000815
PRAI	DE 2000-10040592		20000815		

AB The invention concerns drug formulations that are composed of hydrogel-copolymers in order to increase the bioavailability of peptidomimetics, antibiotics, substrates for the P-glycoprotein system, for cytochrome P 450, heparin, nucleotides, vaccines, ligand drugs etc. Hydrogel copolymers are formed from ethylenically unsatd. carboxylic acids and the polyalkylene glycol ester of an ethylenically unsatd. carboxylic acid, e.g. methacrylic acid-polyethyleneglycol methacrylate copolymer. Other ingredients include stabilizers, peptidase inhibitors, solubilizers, permeation enhancers, wetting agents, cyclodextrins, gelatine.

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT Antibiotics
(macrolide; drug formulations with increased bioavailability contg. hydrogel-copolymers)
IT 50-02-2, Dexamethasone 50-48-6 51-21-8, 5-Fluorouracil 51-34-3, Scopolamine 57-41-0, Phentyoine 69-53-4, Ampicillin 71-63-6, Digitoxin 79-10-7D, Acrylic acid, copolymer with polyalkylene glycol-unsatd. carboxylic acid esters and polyalkylene glycol ester, copolymers with unsatd. carboxylic acids 79-41-4D, Methacrylic acid, copolymer with polyalkylene glycol-unsatd. carboxylic acid esters and polyalkylene glycol ester, copolymers with unsatd. carboxylic acids 81-81-2, Warfarin 97-65-4D, Itaconic acid, copolymer with polyalkylene glycol-unsatd. carboxylic acid esters and polyalkylene glycol ester, copolymers with unsatd. carboxylic acids 110-16-7D, Maleic acid, copolymer with polyalkylene glycol-unsatd. carboxylic acid esters and polyalkylene glycol ester, copolymers with unsatd. carboxylic acids 110-17-8D, Fumaric acid, copolymer with polyalkylene glycol-unsatd. carboxylic acid esters and polyalkylene glycol ester, copolymers with unsatd. carboxylic acids 113-15-5, Ergotamine 114-07-8, Erythromycin 298-46-4, Carbamazepine 315-30-0, Allopurinol 331-39-5D, Caffeic acid, copolymer with polyalkylene glycol-unsatd. carboxylic acid esters and polyalkylene glycol ester, copolymers with unsatd. carboxylic acids 359-83-1, Pentazocin 435-97-2, Phenprocoumon 498-23-7D, Citraconic acid, copolymer with polyalkylene glycol-unsatd. carboxylic acid esters and polyalkylene glycol ester, copolymers with unsatd. carboxylic acids 499-12-7D, Aconitic acid, copolymer with polyalkylene glycol-unsatd. carboxylic acid esters and polyalkylene glycol ester, copolymers with unsatd. carboxylic acids 511-12-6, Dihydroergotamine 621-82-9D, Cinnamic acid, copolymer with polyalkylene glycol-unsatd. carboxylic acid esters and polyalkylene glycol ester, copolymers with unsatd. carboxylic acids 865-21-4, Vinblastin

1135-24-6D, Ferulaic acid, copolymer with polyalkylene glycol-unsatd. carboxylic acid esters and polyalkylene glycol ester, copolymers with unsatd. carboxylic acids 1397-89-3, Amphotericin B 1403-66-3, Gentamicin 3562-84-3, Benzbrumaron 3724-65-0D, Crotonic acid, copolymer with polyalkylene glycol-unsatd. carboxylic acid esters and polyalkylene glycol ester, copolymers with unsatd. carboxylic acids 5355-48-6 9005-49-6, Heparin, biological studies 11005-63-3, Strophanthin 12619-70-4, Cyclodextrin 14556-46-8, Bupranolol 20830-75-5, Digoxin 21829-25-4, Nifedipine 23214-92-8, Doxorubicin 25190-06-1D, Polybutylene glycol, ester with unsatd. carboxylic acid, copolymer with unsatd. carboxylic acids 25322-68-3D, Polyethylene glycol, ester with unsatd. carboxylic acid, copolymer with unsatd. carboxylic acids 25322-69-4D, Polypropylene glycol, ester with unsatd. carboxylic acid, copolymer with unsatd. carboxylic acids 29122-68-7, Atenolol 30685-43-9, Metildigoxin 32986-56-4, Tobramycin 33069-62-4, Paclitaxel 37517-28-5, Amikacin 51931-66-9, Tildidine 53123-88-9, Sirolimus 59467-70-8, Midazolam 59865-13-3, Ciclosporin 60205-81-4, Ipratropium 63527-52-6, Cefotaxime 69739-16-8, Cefodizime 73384-59-5, Ceftriaxone **80214-83-1**, **Roxithromycin** 80619-41-6, Echinocandin 84957-29-9, Cefpirome 88040-23-7, Cefepime 99614-02-5, Ondansetron 103628-46-2, Sumatriptan 104987-11-3, Tacrolimus 109889-09-0, Granisetron 114977-28-5, Docetaxel 127779-20-8, Saquinavir 139264-17-8, Zolmitriptan 150378-17-9, Indinavir 155213-67-5, Ritonavir 161814-49-9, Amprenavir 383904-90-3
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(drug formulations with increased bioavailability contg.
hydrogel-copolymers)

L13 ANSWER 7 OF 59 WPIDS (C) 2003 THOMSON DERWENT
 AN 2002-681297 [73] WPIDS
 CR 2000-245933 [21]; 2002-105209 [14]; 2002-394310 [42]; 2002-405154 [43]
 DNN N2002-537757 DNC C2002-192213
 TI Formable bone composition useful for repairing bone defects comprises demineralized osteoinductive and osteoconductive bone powder and sodium hyaluronate in a phosphate buffer solution.
 DC B04 D22 P32
 IN GERTZMAN, A A; SUNWOO, M H
 PA (MUSC-N) MUSCULOSKELETAL TRANSPLANT FOUND
 CYC 1
 PI US 6437018 B1 20020820 (200273)* 10p
 ADT US 6437018 B1 CIP of US 1998-31750 19980227, CIP of US 1999-365880 19990803, US 2000-515656 20000229
 FDT US 6437018 B1 CIP of US 6030635
 PRAI US 2000-515656 20000229; US 1998-31750 19980227; US 1999-365880 19990803
 AB US 6437018 B UPAB: 20021113
 NOVELTY - A formable bone composition comprises 25-35 wt.% demineralized osteoinductive and osteoconductive bone powder with a particle size of 100-850 microm and 0.75-5 wt.% sodium hyaluronate with a molecular weight of 600,000-3,000,000 and a stable viscosity over a temperature range of 22-37 deg. C in a phosphate buffer solution giving a pH of 6.8-7.4.
 USE - The composition is useful for promoting new bone growth in bone defects.
 ADVANTAGE - The composition is easily shaped, is not washed away by flowing blood and avoids the toxicity problems associated with organic solvents.
 Dwg.0/0
 TECH. . .
 putty composition comprising demineralized lyophilized allograft bone powder with a particle size of 250-710 microm and 2-5 wt.% of a **hydrogel** component comprising sodium hyaluronate and its derivatives with a molecular weight of at least 600,000 in a phosphate buffer solution. . . saline phosphate buffer solution giving a pH of

6.8-7.4.

Preferred components: (1) preferably includes and antimicrobial agent and/or antibiotic, e.g. **erythromycin**, bacitracin, neomycin, penicillin, polymyxin B, tetracycline, viomycin, chloromycetin, streptomycin, cefazolin, ampicillin, azactam, tobramycin, clindamycin, gentamicin and vitamins.

L13 ANSWER 8 OF 59 WPIDS (C) 2003 THOMSON DERWENT
AN 2003-142604 [14] WPIDS
DNN N2003-113281 DNC C2003-036498
TI Wound dressing for sacrum, comprises wound facing sheet which is permeable to wound fluid and attached to back sheet, compartments with absorbent material and liquid permeable adhesive layer on wound facing surface.
DC B07 D22 E19 P32
IN EWER, C J
PA (JOHJ) JOHNSON & JOHNSON MEDICAL LTD
CYC 100
PI GB 2375485 A 20021120 (200314)* 24p
WO 2002091964 A2 20021121 (200314) EN
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
NL OA PT SD SE SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT
RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM
ZW
ADT GB 2375485 A GB 2001-11755 20010514; WO 2002091964 A2 WO 2002-GB2202
20020513
PRAI GB 2001-11755 20010514
AB GB 2375485 A UPAB: 20030227
NOVELTY - A wound dressing comprises back sheet (12), a wound facing sheet (14) which is permeable to wound fluid over at least first portion of its area and attached to (12) by several bonding regions, an array of compartments between back sheet and WFS, an absorbent material contained within compartments and a liquid permeable adhesive layer on wound facing surface of (14).
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a method of manufacturing a wound dressing, which involves:
(1) providing a wound facing sheet having a back surface and a wound facing surface;
(2) providing a back sheet;
(3) forming an array of indentations on at least one of the back surfaces of the wound facing sheet and the back sheet;
(4) providing absorbent material with indentations;
(5) attaching the backing sheet to the wound facing sheet along a network of bonding lines defined between the array of indentations to entrap the absorbent material within the indentations; and
(6) providing a liquid permeable adhesive layer on the wound facing surface of the wound facing sheet.
USE - It is used as a wound dressing for the sacrum.
ADVANTAGE - The back sheet provides a liquid and microorganism impermeable support to the dressing. The wound facing sheet allows fluid to pass through the wound facing sheet from the wound facing surface to the back surface, but blocks or restricts flow of the fluid back in the reverse direction. The ingress of water and other undesirables from the edges of the dressing is further minimized by providing a hydrogel adhesive in the interstices between compartments on the wound facing side of the dressing. The adjacently disposed absorbent compartments and the hydrogel form a protective seal to prevent the ingress of moisture to the dressing. The wound dressing can be cut to any size or shape without degradation of the adhesive properties of dressing, and allows flexibility in the usage of the wound dressing, and so wastage of the wound dressing is prevented.

DESCRIPTION OF DRAWING(S) - The figure shows an enlarged view of a part of the cross-sectional view of the wound dressings.

Back sheet 12

Wound facing sheet. 14

Dwg.2a/3

TECH.

one removable cover sheet on the adhesive. The absorbent material comprises a hydrophilic foam material. The adhesive layer comprises a **hydrogel** material which is polyurethane gels, biopolymer gels, carboxymethyl cellulose gels, hydroxy ethyl cellulose gels, hydroxy propyl methyl cellulose and/or modified. . . . extract (gamma linolenic acid), soya oil, tea tree oil, coconut oil, almond oil, camomile extract, cod liver oil, peanut oil, **emu** oil, aloe vera, sunflower oil, avocado oil, jojoba oil and/or cocoamide. The adhesive layer or the absorbent sheet comprises an. . . .

L13 ANSWER 9 OF 59 WPIDS (C) 2003 THOMSON DERWENT

AN 2002-601592 [65] WPIDS

DNN N2002-476904 DNC C2002-170159

TI Layered wound dressing material for treating of exuding wounds, comprises wound facing hydrogel layer, and barrier layer comprising pH-sensitive material.

DC A96 B05 B07 D22 P34

IN MARSDEN, C D; SILCOCK, D; MARSDEN, D C

PA (JOHJ) JOHNSON & JOHNSON MEDICAL LTD

CYC 100

PI GB 2369997 A 20020619 (200265)* 23p

WO 2002047737 A1 20020620 (200265) EN

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
NL OA PT SD SE SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT
RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM
ZW

AU 2002022161 A 20020624 (200267)

ADT GB 2369997 A GB 2000-30308 20001212; WO 2002047737 A1 WO 2001-GB5466
20011211; AU 2002022161 A AU 2002-22161 20011211

FDT AU 2002022161 A Based on WO 200247737

PRAI GB 2000-30308 20001212

AB GB 2369997 A UPAB: 20021010

NOVELTY - A layered wound dressing material comprises a wound facing hydrogel layer (9), and a barrier layer (6, 8). The barrier layer comprises a pH-sensitive material that is insoluble in water at 25 deg. C under acidic conditions, but is soluble in water at 25 deg. C under neutral or alkaline conditions.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a method of controlling the absorption of wound exudate from a wound site by contacting the pH-sensitive barrier layer with the wound exudate. The wound exudate dissolves the barrier layer, allowing then for increased passage of exudate from the wound site.

ACTIVITY - Dermatological

MECHANISM OF ACTION - None given in source material

USE - For treating of exuding wounds.

ADVANTAGE - The inventive wound dressing material can maintain a lowered pH at the surface of the wound, thus capable of assisting wound healing. It can release active therapeutic agents selectively into exuding wounds.

DESCRIPTION OF DRAWING(S) - The figure shows a perspective view of the wound contacting surface of the wound dressing.

Liquid-impermeable backing layer 2

Absorbent layer 5

Barrier layer 6, 8

Hydrogel layer 9
Dwg.1/2

TECH. . .
extract (gamma linolenic acid), soya oil, tea tree oil, coconut oil, almond oil, camomile extract, cod liver oil, peanut oil, **emu** oil, aloe vera, sunflower oil, avocado oil, jojoba oil, and/or cocoamide. It may also include an active therapeutic agent or. . . water-soluble acid and the conjugate base of the buffer system are both solids when anhydrous at 25 degrees C. The **hydrogel** layer has an acid buffering capacity of at least 0.05 (preferably at least 0.1) mmol/g dry weight of the **hydrogel** layer.

TECHNOLOGY FOCUS - INORGANIC CHEMISTRY - Preferred Component: (9) can include a silver compound. The water-soluble acid buffer system. . .

L13 ANSWER 10 OF 59 CAPLUS COPYRIGHT 2003 ACS
AN 2003:73320 CAPLUS
TI The use of thermoresponsive hydrogel membrane as modulated drug delivery system
AU Dinarvand, Rassoul; Ansari, Mehdi
CS Faculty of Pharmacy, Tehran University of Medical Sciences, Tehran, Iran
SO Daru, Journal of Faculty of Pharmacy, Tehran University of Medical Sciences (2002), 10(3), 105-110
CODEN: DJTSFE; ISSN: 1560-8115
PB Tehran University of Medical Sciences, Faculty of Pharmacy
DT Journal
LA English
AB Stimuli-sensitive polymers are suitable candidates for novel drug delivery systems, since they release drugs in a controlled manner in response to a stimulus such as temp. In the present study temp.-sensitive polymer of N-isopropylacryamide (NIPAAm) was evaluated to modulate release of drugs with different mol. wts. Membranes of poly NIPAAm and its copolymers with acryl amide (AAm) were prep'd. by casting monomers, cross linker, and initiator between two glass plates with a defined spacer thickness. These thermo sensitive **hydrogels** that cross linked with N,N-methylene-bis-acrylamide (MBAAm) showed a swelling transition temps. (37.degree.C) that was used in the permeation control of hydroxy urea (HU) and **erythromycin** (Er). Permeation rates of the drugs in various temps. were investigated. It was shown that the diffusion rate of HU and Er through membranes is increased with a decrease in temp. This phenomenon may be explained by the swelling (hydration) properties of the polymers and the thermodn. influence of temp. and may be used as on-off switching key for controlled release of different mols.

RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB Stimuli-sensitive polymers are suitable candidates for novel drug delivery systems, since they release drugs in a controlled manner in response to a stimulus such as temp. In the present study temp.-sensitive polymer of N-isopropylacryamide (NIPAAm) was evaluated to modulate release of drugs with different mol. wts. Membranes of poly NIPAAm and its copolymers with acryl amide (AAm) were prep'd. by casting monomers, cross linker, and initiator between two glass plates with a defined spacer thickness. These thermo sensitive **hydrogels** that cross linked with N,N-methylene-bis-acrylamide (MBAAm) showed a swelling transition temps. (37.degree.C) that was used in the permeation control of hydroxy urea (HU) and **erythromycin** (Er). Permeation rates of the drugs in various temps. were investigated. It was shown that the diffusion rate of HU and Er through membranes is increased with a decrease in temp. This phenomenon may be explained by the swelling (hydration) properties of the polymers and the thermodn. influence of temp. and may be used as on-off switching key for controlled release of different mols.

L13 ANSWER 11 OF 59 PROMT COPYRIGHT 2003 Gale Group

AN 2001:347654 PROMT
TI Ethnic Hair Care NEW INGREDIENTS.
SO Household & Personal Products Industry, (April 2001) Vol. 38, No. 4, pp. 85.

PB Rodman Publications, Inc.
DT Newsletter
LA English
WC 3010

FULL TEXT IS AVAILABLE IN THE ALL FORMAT

AB Here is a list of new hair care ingredients introduced by suppliers in the past 12 months. For more information about the products listed here, contact the supplier directly at the numbers provided.
THIS IS THE FULL TEXT: COPYRIGHT 2001 Rodman Publications, Inc.

Subscription: \$48.00 per year. Published monthly. 17 S. Franklin Turnpike, Box 555, Ramsey, NJ 07446.

TX **Emu Oil--Ultra Refined**

INCI name: **emu** oil Use levels: lotions and creams (210%); bar soaps (3-6%); shampoos and conditioners (3-20%)

Comments: **Emu Oil--Ultra Refined** is an incredible lipid replenishing ingredient which may be used in all types of skin care, cosmetics, soaps and hair conditioners. **Emu Oil** is legendary in Australia for its healing abilities for dry, irritated skin and scalp. Its unique penetrating properties make. . .

Comments: . . . sparkling gels with anionic detergent systems. It enhances foam height, functions as an excellent thickener and gelling agent and forms **gels** with propylene glycol and **dimethicone** copolyol.

L13 ANSWER 12 OF 59 PROMT COPYRIGHT 2003 Gale Group

AN 2001:873244 PROMT
TI Music & sound products: suppliers of: amplifiers, band & orchestral products; cases; DJ products; fretted instruments; percussion products; recording equipment; sound reinforcement equipment; synthesizers & related MIDI and electronic music products; karaoke hardware; general accessories, also, music distributors.

SO Music Trades, (Nov 2001) Vol. 149, No. 10, pp. S45(240).
ISSN: 0027-4488.

PB Music Trades Corp.
DT Newsletter
LA English
WC 111366

FULL TEXT IS AVAILABLE IN THE ALL FORMAT

AB 1833 SHOP/GUITARMAKER'S CONNECTION (A Part of the Martin Guitar Company)--P.O. Box 329, Nazareth, Pennsylvania 18064. Telephone: (610) 759-2837. Toll-free telephone: 800-247-6931. Fax: (610) 759-5757. E-mail: info@martinguitar.com. Website: www.martinguitar.com.
THIS IS THE FULL TEXT: COPYRIGHT 2001 Music Trades Corp.

Subscription: \$14.00 per year. Published monthly. 80 West Street, P.O. Box 432, c/o Paul A. Majeski Ed., Englewood, NJ 07631.

TX The EBow is a hand-held electronic **bow for** guitar, **featuring "Direct** String Synthesis." The EBow produces a powerful infinite sustain, rich in harmonics for incredible **guitar** sounds.

L13 ANSWER 13 OF 59 PROMT COPYRIGHT 2003 Gale Group

AN 2001:126585 PROMT
TI MUSIC & SOUND PRODUCTS.

SO Music Trades, (Jan 2001) Vol. 148, No. 12, pp. S45.
ISSN: 0027-4488.

PB Music Trades Corp.

DT Newsletter

LA English

WC 109398

FULL TEXT IS AVAILABLE IN THE ALL FORMAT

AB SUPPLIERS OF: Amplifiers, Band & Orchestral Products; Cases; DJ Products; Fretted Instruments; Percussion Products; Recording Equipment; Sound Reinforcement Equipment; Synthesizers & Related MIDI and Electronic Music Products; Karaoke Hardware; General Accessories. Also, Music Distributors.

THIS IS THE FULL TEXT: COPYRIGHT 2001 Music Trades Corp.

Subscription: \$14.00 per year. Published monthly. 80 West Street, P.O. Box 432, c/o Paul A. Majeski Ed., Englewood, NJ 07631.

TX eMEDIA--664 NE Northlake Way, Seattle, Washington 98105-6428. Telephone: (206) 329-5657. Fax: (206) 329-0235. E-mail: adrianb@emedia.org and bdecoster@emedia.org. Web site: www.emedia.org. Adrian Burton, president; Bart DeCoster, marketing coordinator.

L13 ANSWER 14 OF 59 PROMT COPYRIGHT 2003 Gale Group

AN 2001:834954 PROMT

TI INGREDIENTS.(directory of food ingredient companies)(Directory)

SO Food Processing, (Oct 2001) Vol. 62, No. 10, pp. 35.

ISSN: 0015-6523.

PB Putman Publishing, Co.

DT Newsletter

LA English

WC 37077

FULL TEXT IS AVAILABLE IN THE ALL FORMAT

AB ACIDULANTS

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Subscription: \$40.00 per year. Published monthly. 301 East Erie Street, Chicago, IL 60611.

TX Dawn Food Products Inc.

L13 ANSWER 15 OF 59 PROMT COPYRIGHT 2003 Gale Group

AN 2001:472890 PROMT

TI Trademarks.(Illustration)

SO PPCJ. Polymers Paint Colour Journal, (April 2001) Vol. 191, No. 4439, pp. 28.

ISSN: 1357-731X.

PB DMG Business Media Ltd.

DT Newsletter

LA English

WC 7773

FULL TEXT IS AVAILABLE IN THE ALL FORMAT

AB 6D METER -- Safety detector

THIS IS THE FULL TEXT: COPYRIGHT 2001 DMG Business Media Ltd.

Subscription: 236.00 British pounds per year. Published monthly. Queensway House, 2 Queensway, Redhill, Surrey RH1 1QS., United Kingdom

TX Miwon Commercial Co Ltd

L13 ANSWER 16 OF 59 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 1

AN 2001:936032 CAPLUS

DN 136:58887

TI Treating traumatic burns or blisters of the skin by a polymer-based

hydrogel
IN Hymes, Alan C.; Nichols, Jane
PA USA
SO U.S. Pat. Appl. Publ., 11 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2001055608	A1	20011227	US 1999-314271	19990518
	US 6348212	B2	20020219		
PRAI	US 1999-314271		19990518		

AB Blisters of the skin are treated by applying to the skin over the blister a flexible moisture-contg. hydrophilic hydrogel patch that includes a backing support such as paper, cloth or plastic and a water-based hydrogel layer applied to the backing. The hydrogel layer comprises a hydrophilic natural or synthetic polymer to provide body dispersed in water and can be a tacky adhesive. The polymer can comprise any high mol. wt. hydrophilic carbohydrate such as karaya, cornstarch, or a kelp gel and/or a synthetic hydrophilic polymer such as polyacrylamide or polyacrylic acid. A humectant such as a polyhydric alc., keeps the gel layer moist. A solute such as salt, protein, sugar or an alc. is dissolved in the water in a quantity sufficient to raise the osmotic pressure enough to maintain the hydrogel layer in a hypertonic state with respect to the blister. The hydrogel which hydrates the normally dry upper layer of skin forms a hydrophilic bridge with the patient's skin that allows fluid to be drawn by osmotic pressure from the blister through the normally dry stratum corneum into the patch. In addn., the hydrogel very quickly significantly diminishes the pain secondary to skin burns and blisters. For example, a hydrophilic adhesive compn. contained (by wt.) glycerin 22.0%, water 10.0%, propylene glycol 20.0%, NaCl 1.0%, and polyquaternary amine 37.0%. Patches contg. this compn. were applied to the patient with second degree burns and blisters on the hand and fingers. Within 5 min the patient reported that the pain was completely gone. The patches were replaced about 3 h after they were first placed. Examn. of the fingers revealed there was no clin. fluid within the blisters and there was no recurrent pain to the air or gentle palpation. When the burned areas were exmd. 4 days later, there were only minimal findings in the wounded areas. Further, the patient had never had any recurrence of pain or limitations of motion and use of the fingers. The probable action of the hypertonic hydrophilic gel layer of the patch on first and second degree burns is twofold. First, the hypertonic gel layer removed the fluid within the blisters and some of the increased extracellular fluid in the surrounding areas as a result of the burn. The result of this action reduced the inflammation which apparently never returned. Second, the immediate effect of the hydrophilic gel almost immediately removed the pain by covering the burned surface with a moist layer of hydrogel, thereby reducing or eliminating the irritation to the pain sensors in the burned skin. As the fluid was removed and the acute inflammation subsided, the pain also clin. abated without the presence of the hydrogel patch.

IT 56-81-5, Glycerin, biological studies 57-50-1, Sucrose, biological studies 57-55-6, Propylene Glycol, biological studies 60-54-8, Tetracycline 64-19-7, Acetic acid, biological studies 67-63-0, Isopropyl alcohol, biological studies 69-72-7, Salicylic acid, biological studies 70-30-4, Hexachlorophene 79-10-7D, Acrylic acid, esters, copolymer 94-36-0, Benzoyl peroxide, biological studies 107-21-1, Ethylene Glycol, biological studies 114-07-8, **Erythromycin** 129-16-8, Mercurochrome 302-79-4, Retinoic acid 4759-48-2, Isotretinoin 7722-84-1, Hydrogen peroxide, biological studies 7761-88-8, Silver nitrate, biological studies 9000-36-6, Karaya gum 9000-69-5, Pectin 9002-84-0, Polytetrafluoroethylene 9002-88-4, Polyethylene 9002-89-5, Polyvinyl alcohol 9003-01-4, Polyacrylic acid

9003-05-8, Polyacrylamide 9003-20-7, Vinyl acetate resin 9004-32-4, Carboxymethyl cellulose 9050-36-6, Maltodextrin 18472-51-0, Chlorhexidine gluconate 22916-47-8, Miconazole 25549-84-2, Polysodium acrylate 25655-41-8, Povidone iodine 26061-64-3, Dioctyl maleate-vinyl acetate copolymer 59277-89-3, Acyclovir 66676-63-9, Carboxypropyl cellulose

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hypertonic polymer-based **hydrogel** patch for treatment of traumatic burns or blisters)

L13 ANSWER 17 OF 59 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 2

AN 2001:830888 CAPLUS

DN 135:362645

TI Bioresorbable hydrogel compositions for implantable prostheses

IN Loomis, Gary L.; Lentz, D. Christian

PA Scimed Life Systems, Inc., USA

SO U.S., 11 pp., Cont.-in-part of U.S. 6,028,164.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6316522	B1	20011113	US 1999-395725	19990914
	US 5854382	A	19981229	US 1997-914130	19970818
	US 6005020	A	19991221	US 1998-145588	19980902
	US 6028164	A	20000222	US 1999-243379	19990201
	US 2002035168	A1	20020321	US 2001-957427	20010920
	US 6534560	B2	20030318		
PRAI	US 1997-914130	A3	19970818		
	US 1998-145588	A1	19980902		
	US 1999-243379	A2	19990201		
	US 1999-395725	A1	19990914		

AB Crosslinked compns. formed from water-insol. copolymers are disclosed. These compns. are copolymers having a bioresorbable region, a hydrophilic region and at least two cross-linkable functional groups per polymer chain. Crosslinking of these polymers can be effected in soln. in org. solvents or in solvent-free systems. If crosslinking occurs in a humid environment, a hydrogel will form. If crosslinking occurs in a non-humid environment, a xerogel will form which will form a hydrogel when exposed to a humid environment and the resulting crosslinked materials form hydrogels when exposed to humid environments. These hydrogels are useful as components in medical devices such as implantable prostheses. In addn., such hydrogels are useful as delivery vehicles for therapeutic agents and as scaffolding for tissue engineering applications. The claimed water-insol. copolymers include lactide-oxirane copolymer dimethacrylate and lactide-methyloxirane-oxirane copolymer dimethacrylate.

RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT 50-18-0, Cyclophosphamide 50-44-2, 6-Mercaptopurine 51-21-8, 5-Fluorouracil 51-75-2, Mechlorethamine 54-42-2, Idoxuridine 56-75-7, Chloramphenicol 57-22-7, Vincristine 59-05-2, Methotrexate 60-54-8, Tetracycline 70-00-8, Trifluridine 114-07-8, **Erythromycin** 147-94-4, Cytarabine 148-82-3, Melphalan 154-21-2, Lincomycin 154-93-8, Carmustine 305-03-3, Chlorambucil 768-94-5, Amantadine 865-21-4, Vinblastine 1404-00-8, Mitomycin 1404-90-6, Vancomycin 1406-05-9, Penicillin 1406-11-7, Polymyxin 3778-73-2, Ifosfamide 4428-95-9, Foscarnet 5536-17-4, Vidarabine 8001-27-2, Hirudin 9002-01-1, Streptokinase 9005-49-6, Heparin, biological studies 9007-28-7, Chondroitin sulfate 9015-68-3, Asparaginase 9039-53-6, Urokinase 9050-30-0, Heparan sulfate 10540-29-1, Tamoxifen 11056-06-7, Bleomycin 11111-12-9, Cephalosporin 13010-20-3, Nitrosourea 13010-47-4, Lomustine 13311-84-7, Flutamide

13392-28-4, Rimantadine 15663-27-1, Cisplatin 18323-44-9, Clindamycin 20830-81-3, Daunomycin 23214-92-8, Doxorubicin 24967-94-0, Dermatan sulfate 30516-87-1, Zidovudine 33069-62-4, Paclitaxel 33419-42-0, Etoposide 36791-04-5, Ribavirin 59277-89-3, Acyclovir 82410-32-0, Ganciclovir 114977-28-5, Docetaxel 169799-44-4, Keratin sulfate 364591-16-2, Lactide-poe block copolymer dimethacrylate 372963-02-5, Lactide-methyloxirane-oxirane block copolymer dimethacrylate
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(bioresorbable **hydrogels** as drug carriers and as coating agents for medical goods and prosthetics)

L13 ANSWER 18 OF 59 WPIDS (C) 2003 THOMSON DERWENT
AN 2002-066040 [09] WPIDS
DNC C2002-019595
TI Use of a substantially dehydrated hydrogel article in e.g. anchoring an implant in a lumen or void in a body.
DC B04 B07
IN SAWHNEY, A S
PA (SAWH-I) SAWHNEY A S
CYC 1
PI US 2001046518 A1 20011129 (200209)* 14p
ADT US 2001046518 A1 US 1998-134199 19980814
PRAI US 1998-134199 19980814
AB US2001046518 A UPAB: 20020208
NOVELTY - Anchoring an implant in a lumen or void in a body involves positioning a member comprising crosslinked **hydrogel** in the lumen or void; and hydrating the member. The **hydrogel** is introduced in a dry, less hydrated or substantially deswollen state and rehydrate in a physiological environment to undergo a volumetric expansion and to anchor the implant into the lumen or void.
DETAILED DESCRIPTION - Anchoring an implant in a lumen or void in a body involves:
(i) providing a member containing a crosslinked **hydrogel**. The member has a first state in which the **hydrogel** is at substantially less than an equilibrium level of hydration and a second state in which the **hydrogel** is substantially at the equilibrium level of hydration;
(ii) positioning the member in the lumen or void in the first state; and
(iii) hydrating the member to transition the **hydrogel** to the second state so that the member undergoes volumetric expansion to become anchored within and occlude the lumen or void.
INDEPENDENT CLAIMS are also included for the following:
(1) augmenting tissue in a mammalian body involving: the step (i), creating a cavity in the tissue, positioning the member in the cavity in the first state and hydrating the member to transition the **hydrogel** to the second state so that the member expands the tissue and becomes lodged within the cavity; and
(2) anchoring a medical device within a mammalian body involving the step (i), coating an exterior surface of the medical device with the **hydrogel**, positioning the medical device in the mammalian body in the first state and hydrating the **hydrogel** to transition the **hydrogel** to the second state so that the member undergoes volumetric expansion and anchors the medical device within the mammalian body.
USE - For anchoring an implant in a lumen or void (such as a needle track formed by a biopsy device; the naturally occurring body passageway which forms a portion of reproductive system of a mammal, (preferably a fallopian tube); arteriovenous malformation; or a bone canal in a body), augmenting tissue (preferably sphincter tissue) in a mammalian body and anchoring a medical device (comprising a suture disposed through a needle hole or a stent graft system) within a mammalian body (all claimed). Also for sealing tissues of organs, for sealing or occluding a body lumen, for

plugging voids created in tissue during surgical procedures.

ADVANTAGE - The **hydrogel** articles undergoes a relatively large degree of swelling in-situ, reduces the risk of hemorrhage after tissue removals, hydrates relatively quickly and without substantial degradation of mechanical properties and optionally permits controlled release of therapeutic agents at an implantation site. Hydration of the member renders the mammal sterile or augments the volume of a sphincter. The **hydrogel** polymers are bioabsorbable or biostable; exhibit a relatively large degree of swelling and rapid rehydration rate; includes any variety of **hydrogel** biomaterials of natural, recombinant or of synthetic origin or its hybrids; rehydrates rapidly within a few minutes of being placed in a moist tissue environment to anchor itself within tissue. The **hydrogel** provides controlled delivery of various antibiotics (including aminoglycoside, **macrolide**, such as **erythromycin**, penicillins, cephalosporin), anesthetic/analgesic delivery pre-or post surgery or to treat pain using such agents a amide-type local anesthetics like lidocaine, mepivacaine, pyrrocaine, bupivacaine, prilocaine, etiocaïne and local controlled delivery of non-steroidal anti-inflammatory drugs such as ketorolac, naproxen, diclofence sodium and flurbiprofen.

Dwg.0/0

AB

. . . 20020208

NOVELTY - Anchoring an implant in a lumen or void in a body involves positioning a member comprising crosslinked **hydrogel** in the lumen or void; and hydrating the member. The **hydrogel** is introduced in a dry, less hydrated or substantially deswollen state and rehydrate in a physiological environment to undergo a. . . Anchoring an implant in a lumen or void in a body involves:

(i) providing a member containing a crosslinked **hydrogel**. The member has a first state in which the **hydrogel** is at substantially less than an equilibrium level of hydration and a second state in which the **hydrogel** is substantially at the equilibrium level of hydration;

(ii) positioning the member in the lumen or void in the first state; and

(iii) hydrating the member to transition the **hydrogel** to the second state so that the member undergoes volumetric expansion to become anchored within and occlude the lumen or. . . in the tissue, positioning the member in the cavity in the first state and hydrating the member to transition the **hydrogel** to the second state so that the member expands the tissue and becomes lodged within the cavity; and

(2) anchoring. . . medical device within a mammalian body involving the step (i), coating an exterior surface of the medical device with the **hydrogel**, positioning the medical device in the mammalian body in the first state and hydrating the **hydrogel** to transition the **hydrogel** to the second state so that the member undergoes volumetric expansion and anchors the medical device within the mammalian body. . . for sealing or occluding a body lumen, for plugging voids created in tissue during surgical procedures.

ADVANTAGE - The **hydrogel** articles undergoes a relatively large degree of swelling in-situ, reduces the risk of hemorrhage after tissue removals, hydrates relatively quickly. . . at an implantation site. Hydration of the member renders the mammal sterile or augments the volume of a sphincter. The **hydrogel** polymers are bioabsorbable or biostable; exhibit a relatively large degree of swelling and rapid rehydration rate; includes any variety of **hydrogel** biomaterials of natural, recombinant or of synthetic origin or its hybrids; rehydrates rapidly within a few minutes of being placed in a moist tissue environment to anchor itself within tissue. The **hydrogel** provides controlled delivery of various antibiotics (including aminoglycoside, **macrolide**, such as **erythromycin**, penicillins, cephalosporin), anesthetic/analgesic delivery pre-or post surgery or to treat pain using such agents a amide-type local anesthetics like

lidocaine, . . .

L13 ANSWER 19 OF 59 PROMT COPYRIGHT 2003 Gale Group

AN 2000:453295 PROMT
TI MANUFACTURED BRANDS.
SO Implement & Tractor, (Annual 2000) pp. 118.
ISSN: 0019-2953.
PB Freiburg Publishing Co. Inc.
DT Newsletter
LA English
WC 6900
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AB 3-IN-ONE
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Cedar Falls, IA 50613. FAX 319-277-3783.

TX FLOWMASTER

L13 ANSWER 20 OF 59 WPIDS (C) 2003 THOMSON DERWENT
AN 2000-205553 [18] WPIDS
DNN N2000-152972 DNC C2000-063354
TI Medicinal products, e.g. catheters or prostheses, contain two agents of
different lipophilicity to provide retarded release of drugs, e.g.
antimicrobial agents.
DC A96 B05 B07 D22 P34
IN PULVERER, G; SCHIERHOLZ, J M; SCHIERHOLZ, J
PA (SCHI-I) SCHIERHOLZ J M; (SCHI-I) SCHIERHOLZ J
CYC 27
PI WO 2000007574 A1 20000217 (200018)* DE 47p
RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
W: JP US
EP 985413 A1 20000315 (200018) DE
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
RO SE SI
EP 1100479 A1 20010523 (200130) DE
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
ADT WO 2000007574 A1 WO 1999-EP5685 19990805; EP 985413 A1 EP 1998-114781
19980806; EP 1100479 A1 EP 1999-940159 19990805, WO 1999-EP5685 19990805
FDT EP 1100479 A1 Based on WO 200007574
PRAI US 1998-95562P 19980806; DE 1998-19835546 19980806; EP 1998-114781
19980806
AB WO 200007574 A UPAB: 20000412
NOVELTY - Medicinal products contain two components (A) and (B) having
different lipophilicities and water solubilities, at least one of which is
a drug.

DETAILED DESCRIPTION - A non-degradable medicinal product contains
two components (A) and (B), at least one of which is a drug. (A) is more
lipophilic than (B), (A) has a solubility in water of 1-300 μ g/ml and
(B) has a higher solubility than (A). (A) and (B) are each present in an
effective amount, but at not more than 10 wt. % based on the carrier
material. Excluded are combinations of chlorhexidine/silver sulfadiazine,
triclosan-chlorhexidine, polyethylene glycol-polyurethane or combinations
of clotrimazole, triclosan and optionally porous polyethylene.

INDEPENDENT CLAIMS are also included for the following:

(i) the preparation of the products, by swelling, solvent casting,
active agent lacquering, extrusion and/or injection molding of polymers
(such as PUR, SIR or PET) and/or by active agent coating (optionally using
a carrier, e.g. polylactide, polyorthoester, polyethylene glycol, other
bioresorbable polymers or non-resorbable polymers) on metal
endoprostheses; and

(ii) a method for controlling the release of (B) from a medicinal

product, by combining (B) with (A).

USE - The medicinal products are specifically contact lenses, catheters, vascular prostheses, endoprostheses, surgical antimicrobial agent carriers (e.g. collagen non-wovens), stents, 'blades', bone cement, metallic endoprostheses, CAPD catheters, wound coverings, sprayed polyurethane non-wovens or drainage lines (all claimed). They can provide retarded release of a wide range of drugs (e.g. antibiotics or other antimicrobial agents to control infections, sexual hormones for fertility control or cancer treatment, disinfectants, antineoplastic agents, analgesics, antiinflammatories, local anesthetics and/or antithrombotic agents). The drugs may be intracellularly enriched in bacteria, thrombocytes and/or other types of cells. One of (A) and (B) may also be a biologically inactive material (e.g. a surfactant) which improves biocompatibility.

ADVANTAGE - The rate of release of (B) is controlled by the presence of (A), to provide retarded release of (B) into the surrounding environment. Constant rate release of (B) over a prolonged period may be achieved.

Dwg.0/5

TECH.

(A) and (B) are specified in the claims, e.g. nonionic surfactants, phospholipids, hyaluronic acid derivatives, aminoglycosides, cephaloporins, cloramphenicols, penicillins, sulfonamides, **macrolides**, imidazoles, lipophilic silver salts, (anti)estrogens, (anti)gestagens, estrogens, androgens, anabolic steroids, heparin derivatives or acetylsalicylic acid derivatives. Especially preferred (A)/(B) combinations are clindamycin/rifampicin, tyrothricin/rifampicin, hydroprogesterone hexanoate/rifampicin, clotrimazole/EDTA acid and **erythromycin** stearate/gentamycin stearate. Drugs may be made lipophilic by covalent or non-covalent modification, e.g. esterification, ether formation, acetal or hemiacetal formation, . . . POLYMERS - Preferred Materials: The medicinal product is of siloxane, polyurethane, acrylate, polycarbonate, cellulose (or derivative), polytetrafluoroethylene, polyethylene terephthalate or **hydrogel** material, or is an endoprosthesis.

L13 ANSWER 21 OF 59 WPIDS (C) 2003 THOMSON DERWENT

AN 2000-162106 [15] WPIDS

DNN N2000-120927 DNC C2000-050842

TI Transdermal therapeutic system useful for treating male sexual impotence contains sildenafil.

DC A96 B05 B07 D22 P34

IN SPAETH, W; STRUENGMANN, T

PA (HEXA-N) HEXAL AG

CYC 1

PI DE 19834505 A1 20000203 (200015)* 4p

ADT DE 19834505 A1 DE 1998-19834505 19980731

PRAI DE 1998-19834505 19980731

AB DE 19834505 A UPAB: 20000323

NOVELTY - Transdermal therapeutic system (TTS) contains sildenafil (1-(4-ethoxy-3-(6,7-dihydro-1-methyl-7-oxo-3-propyl-1H-pyrazolo(4,3-d)pyrimidin-5-yl)phenylsulfonyl)-4-methylpiperazine, i.e. Viagra (RTM)), or a sildenafil salt.

ACTIVITY - Anti-impotence.

MECHANISM OF ACTION - Cyclic guanosine monophosphate (cGMP)-specific phosphodiesterase type 5 inhibitor.

USE - The TTS is useful for treating male sexual impotence.

ADVANTAGE - The TTS avoids drawbacks associated with oral administration of sildenafil (side effects of which include headache, diarrhea, reddening of the face, nasal congestion and visual disturbance) and provides better patient compliance. Effective plasma sildenafil levels can be achieved rapidly after applying the TTS to the skin, providing greater flexibility and spontaneity.

Dwg.0/0

TECH.

citrate, optionally together with at least one agent that potentiates the activity of sildenafil, preferably a cytochrome P450 inhibitor, especially **erythromycin**, cimetidine, ketoconazole, itraconazole or mibefradil. The TTS is in the form of a patch, cream, ointment, paste or liniment, preferably either (a) cream, ointment, paste or liniment based on a triglyceride-containing lipogel, an (in)organic **hydrogel**, an **emulsion gel** or a polyethylene gel or (b) a matrix-type patch comprising an impermeable backing layer, one or more self-adhesive or adhesive-coated. . . .

L13 ANSWER 22 OF 59 PROMT COPYRIGHT 2003 Gale Group

AN 1999:60469 PROMT
TI The medicines of 2005.
AU Engel, Styli
SO Med Ad News, (Jan 1999) Vol. 18, No. 1, pp. 8(1).
ISSN: 0745-0907.
PB Engel Communications, Inc.
DT Newsletter
LA English
WC 4230

FULL TEXT IS AVAILABLE IN THE ALL FORMAT

AB Prescription medicines in Phase II clinical trials today are destined to be on the market by 2005. Looking ahead six years, a host of new-generation medicines will expand the marketplace and keep the pharmaceutical industry on the track of innovation.

THIS IS THE FULL TEXT: COPYRIGHT 1999 Engel Communications Inc.

TX One . . . is being investigated by DuPont Pharmaceuticals Co., Wilmington, Del. The company is seeking to outlicense this product, which is a **hydrogel** bile acid sequestrant. Company officials say this compound is the most advanced of any **hydrogel** bile acid sequestrant agents in development. **Hydrogels** are more potent than traditional, marketed resin sequestrants, which may allow for lower dosages.

Cephalosporins now dominate the market with a 31% share of the antibacterial market; betalactamase inhibitors about 19%; **macrolides** 13%; quinolones 11%; penicillin products 6%; and tetracyclines 2%.

L13 ANSWER 23 OF 59 PROMT COPYRIGHT 2003 Gale Group

AN 2000:159577 PROMT
TI The CPhI show makes a return to Frankfurt.
SO Manufacturing Chemist, (Oct 1999) pp. 5.
ISSN: 0262-4230.
PB Miller Freeman UK Ltd
DT Newsletter
LA English
WC 8611

FULL TEXT IS AVAILABLE IN THE ALL FORMAT

AB Frankfurt's Messe will be hosting CPhI once again this year, and all the major players in the pharmaceutical ingredients industry will be exhibiting their capabilities

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Subscription: \$175.00 per year. Published monthly. Sovereign Way, Tonbridge, Kent TN9 1RW., United Kingdom

TX Fermic . . . 1968, and is one of the largest producers of antibiotics by fermentation in Latin America. Its products include potassium **clavulanate**, **clarithromycin** and simvastatin, and it exports these around the world. It has several products in the final stage of

development.

Malaysian . . . countries around the world. Its cGMP compliant plant in northern Malaysia manufactures a wide range of bulk active ingredients, including **macrolide** antibiotics, antibacterials, cardiovascular drugs, analgesics, corticosteroids, antidiabetics and antivirals. Its major range is **macrolide** antibiotics, and it claims to be the Asian sub-continent's largest manufacturer and exporter, with an output of 350Mt p.a. in. . .

The . . . granulation aids, film-forming agents, thickeners and suspension aids. Applications include controlled-release formulations, tablet coating and granulation, aqueous suspensions, syrups and **hydrogels**.

L13 ANSWER 24 OF 59 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 3
AN 1999:220016 CAPLUS
DN 130:242351
TI Hydrogel wound dressing and methods of making and using it
IN Huang, Yeong Hua; Earhart, Stephen B.; Fiehler, William R.
PA Tyco Group S.a.r.l., Luxembourg
SO PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9913923	A2	19990325	WO 1998-EP5933	19980917
	WO 9913923	A3	20011220		
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 9916640	A1	19990405	AU 1999-16640	19980917
PRAI	US 1997-59412P	P	19970918		
	WO 1998-EP5933	W	19980917		
AB	A transparent, bubble-free, nonadhesive, insol. hydrogel dressing for draining wounds which is highly absorptive, contours to a wound side, and maintains the wound in a moist state to promote healing thereof comprises a 3-dimensional crosslinked polyurethane/polyurea hydrogel prep'd. from polyurethane prepolymer,. The dressing absorbs moisture and wound exudate up to 70-99% of its total wt., allows for easy removal with no trauma to the wound, protects the wound from contamination, minimizes wound odor, and can be sterilized, e.g. by .gamma.-irradn. The prepolymer is preferably capped with an aliph. polyisocyanate which gelates in 15-90 min on reaction with an alc., glycol, or polyalkylene glycol, H2O, and a polyether-diamine accelerator/chain modifier. Thus, an isophorone diisocyanate-based prepolymer 10 was mixed with PEG 10.0, deionized H2O 30.0, propylene glycol 10.0, and polyether-diamine 0.5 g and the mixt. was placed in a mold; gelation occurred within 90 min at room temp. and was allowed to proceed to completion overnight.				
IT	54-42-2, Idoxuridine 58-14-0, Pyrimethamine 114-07-8, Erythromycin 1405-87-4, Bacitracin 5175-83-7 5536-17-4, Vidarabine 22199-08-2, Silver sulfadiazine				
	RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)				
	(hydrogel wound dressing and methods of making and using it)				

L13 ANSWER 25 OF 59 WPIDS (C) 2003 THOMSON DERWENT

AN 1999-312452 [26] WPIDS
DNN N1999-233353 DNC C1999-092211
TI Controlled size polymeric microspheres.
DC A14 A18 A96 B04 B07 E19 P31 S03
IN CHU, B; DRESCO, P A; ZAITSEV, V
PA (UYNY) UNIV NEW YORK STATE RES FOUND
CYC 81
PI WO 9919000 A1 19990422 (199926)* EN 35p
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL
OA PT SD SE SZ UG ZW
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE
GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG
MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG
UZ VN YU ZW
AU 9896912 A 19990503 (199937)
ADT WO 9919000 A1 WO 1998-US21266 19981008; AU 9896912 A AU 1998-96912
19981008
FDT AU 9896912 A Based on WO 9919000
PRAI US 1997-947545 19971011
AB WO 9919000 A UPAB: 20011203
NOVELTY - Preparing superparamagnetic polymeric microspheres comprises forming water-in-oil emulsion, adding base and dispersing agent, mixing to precipitate core particles of magnetite and applying an energy source to cause polymerization of the monomers around the core particles.
DETAILED DESCRIPTION - Preparing superparamagnetic polymeric microspheres comprises:
(a) forming a water-in-oil microemulsion which comprises a dispersion of an aqueous solution of salts of Fe (II) and Fe (III), polymerization initiator, polymer monomers, surfactant that locates at the interface of oil and water, and oil;
(b) adding base and a dispersing agent which is water soluble;
(c) mixing to precipitate core particles of magnetite within microemulsion microdroplets; and
(d) applying an energy source to the microemulsion with magnetite particles to cause polymerization of the monomers around the core particles, the polymerization taking place within the microemulsion microdroplets, thus forming uniform size microspheres containing a magnetite core with a polymer coating.
An INDEPENDENT CLAIM is included for polymeric microspheres comprising a core which comprises a single superparamagnetic magnetite domain and a polymer coating (hydrogel) around the core.
USE - The biocompatible polymeric microspheres can be used as MRI contrast agents. The process prepares controlled size polymeric microspheres that have a single stable superparamagnetic core, narrow core as well as shell size distributions, and a variable core/shell size ratio. The process accomplishes this by synthesizing both the magnetite particle and the polymer coating within the same controlled size reaction medium i.e. the microdroplet.
ADVANTAGE - The process produces superparamagnetic microspheres having uniform size cores. The method takes advantage of the cage-like effect of the water-in-oil droplets to control the size of the magnetite. This produces magnetite particles that are dramatically smaller and better monodispersed in size than any superparamagnetic polymeric microsphere cores previously prepared. By varying the quantities and nature of components of the microemulsion, the concentration of reactants, the ionic strength and the temperature, a great deal of control can be exercised over the size of the iron oxide core and the polymer coating. The process can prepare polymeric microspheres of uniform size distribution, tailor made to the specifications needed, e.g. for use as magnetic contrast agents. Another advantage of the process is that it comprises an efficient method whereby components are added and processed in a continuous manner, making the process amenable to automation and large scale production e.g. using laboratory robotics.

TECH.

preferably a random copolymer comprising monomers selected from methacrylic acid and hydroxyethyl methacrylate. The polymeric microspheres have a polymeric coating (**hydrogel**) which has a substantially uniform thickness of 10-400 nm. The variance of size distribution of the polymeric microspheres is 0.02. The magnetite is 3.3 wt.% of each microsphere. The saturation magnetization of the magnetite is 2.72 emu/g. The magnetite core is stable against oxidation in aqueous solutions.

L13 ANSWER 26 OF 59 WPIDS (C) 2003 THOMSON DERWENT
AN 1999-461367 [39] WPIDS
DNC C1999-135779
TI Temperature dependent hydrogel used in pharmacology, agrochemical, enzymes is a copolymer obtained by copolymerizing N-alkyl (meth)acrylamide monomer and monomer with reactive functional group in presence of cross linking agent.

DC A14 A96 B07 C07 D16
PA (NIRA) UNITIKA LTD

CYC 1

PI JP 11189626 A 19990713 (199939)* 6p

ADT JP 11189626 A JP 1997-359388 19971226

PRAI JP 1997-359388 19971226

AB JP 11189626 A UPAB: 19990928

NOVELTY - The **hydrogel** is a copolymer obtained by copolymerizing N-alkyl (meth)acrylamide monomer and monomer with reactive functional group in presence of cross linking agent.

USE - In pharmacology (ampicillin, cefazolin, vancomycin, phosphomycin, gentamicin, **erythromycin**, minocycline, chloramphenicol, ciprofloxacin, rifampicin, trimethoprim, isonicotinic acid hydrazide), agrochemical, enzymes.

ADVANTAGE - The **hydrogel** is utilized as release control layer which changes the release velocity of chemical agents depending on temperature. The **hydrogel** of multilayer composition is highly stable on base material surface.

Dwg.0/0

AB JP 11189626 UPAB: 19990928

NOVELTY - The **hydrogel** is a copolymer obtained by copolymerizing N-alkyl (meth)acrylamide monomer and monomer with reactive functional group in presence of cross linking agent.

USE - In pharmacology (ampicillin, cefazolin, vancomycin, phosphomycin, gentamicin, **erythromycin**, minocycline, chloramphenicol, ciprofloxacin, rifampicin, trimethoprim, isonicotinic acid hydrazide), agrochemical, enzymes.

ADVANTAGE - The **hydrogel** is utilized as release control layer which changes the release velocity of chemical agents depending on temperature. The **hydrogel** of multilayer composition is highly stable on base material surface.

Dwg.0/0

L13 ANSWER 27 OF 59 WPIDS (C) 2003 THOMSON DERWENT
AN 1998-271757 [24] WPIDS
DNN N1998-213416 DNC C1998-084742
TI Flexible hydrogel wound dressing - comprising polyurethane prepolymer, polypropylene glycol, propylene glycol, water and optionally bacteriostatic or antimicrobial agent.
DC A25 A96 B05 B07 D22 P32
IN HUANG, Y H
PA (TYCO-N) TYCO GROUP SARL; (SHES) SHERWOOD MEDICAL CO; (SHES) SHERWOOD SERVICES AG
CYC 79
PI WO 9817215 A1 19980430 (199824)* EN 24p
RW: AT BE CH DE DK EA ES FI FR GB GH GR IE IT KE LS LU MC MW NL OA PT

SD SE SZ UG ZW
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE
GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW
MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU
ZW
AU 9749964 A 19980515 (199838)
EP 934041 A1 19990811 (199936) EN
R: AL AT BE CH DE DK ES FI FR GB GR IE IT LI LT LU LV MC NL PT RO SE
SI
NZ 330838 A 20000228 (200017)
AU 720210 B 20000525 (200034)
JP 2001502581 W 20010227 (200115) 18P
US 6238691 B1 20010529 (200132)
ADT WO 9817215 A1 WO 1997-US19198 19971022; AU 9749964 A AU 1997-49964
19971022; EP 934041 A1 EP 1997-912887 19971022, WO 1997-US19198 19971022;
NZ 330838 A NZ 1997-330838 19971022, WO 1997-US19198 19971022; AU 720210 B
AU 1997-49964 19971022; JP 2001502581 W WO 1997-US19198 19971022, JP
1998-519642 19971022; US 6238691 B1 Provisional US 1996-29268P 19961024,
US 1997-955985 19971022
FDT AU 9749964 A Based on WO 9817215; EP 934041 A1 Based on WO 9817215; NZ
330838 A Based on WO 9817215; AU 720210 B Previous Publ. AU 9749964, Based
on WO 9817215; JP 2001502581 W Based on WO 9817215
PRAI US 1996-29268P 19961024; US 1997-955985 19971022
AB WO 9817215 A UPAB: 19980617
A **hydrogel** wound dressing comprises (as wt.%): (a) 5-20%
polyurethane prepolymer; (b) 3-45% polypropylene glycols (PPGs) and
propylene glycols (PGs); (c) water; and optionally (d) a bacteriostatic
and/or antimicrobial agent.
Preferred bacteriostatic agents is bacitracin, **erythromycin**
and particularly bismuth tribromophenate, and the antimicrobial agents
include idoxuridine, trifluorouddine, vidarabine, pyrimethamine and
particularly silver sulfadiazine.
USE - The dressing is flexible, highly absorptive (absorbing 2-6
times its wt.), contours to a wound site and maintains the wound in a
moist state to promote healing. The bacteriostatic or antimicrobial agent
reduces wound odour and risk of infection. The dressing may be in the
shape of a disc (diameter 1-12 inches) or a rope (length 2-12 inches,
width 0.1-2 inches).
ADVANTAGE - The dressing absorbs wound exudate and allows for fewer
dressing changes, is easily removed with no trauma to the wound, and
protects the wound from contamination and reduces odour.
Dwg.0/0
AB WO 9817215 UPAB: 19980617
A **hydrogel** wound dressing comprises (as wt.%): (a) 5-20%
polyurethane prepolymer; (b) 3-45% polypropylene glycols (PPGs) and
propylene glycols (PGs); (c) water; and optionally (d) a bacteriostatic
and/or antimicrobial agent.
Preferred bacteriostatic agents is bacitracin, **erythromycin**
and particularly bismuth tribromophenate, and the antimicrobial agents
include idoxuridine, trifluorouddine, vidarabine, pyrimethamine and
particularly silver sulfadiazine.
USE - The. . .
L13 ANSWER 28 OF 59 PROMT COPYRIGHT 2003 Gale Group
AN 97:472692 PROMT
TI Elan's technologies and pharmaceutical pipeline Research and development
expenditure: \$31.9 million
SO Med Ad News, (Aug 1997) pp. 22.
ISSN: 0745-0907.
LA English
WC 979
FULL TEXT IS AVAILABLE IN THE ALL FORMAT

AB Bioerodable Enhanced Oral Drug Absorption System (Beodas): a technology based upon entrapping drug substances in a biodegradable polymer matrix in a range of submicron-size particles, which protect the drug from hostile environments (such as the gastrointestinal tract) until such time as the drug can be safely released in a precisely controlled manner from the particle.
Dermarlex: a passive transdermal patch system that employs a hydrogel matrix in which a pharmaceutical compound is incorporated.
Dual Release Drug Absorption System (Duredas): is a bilayer tablet technology that has a dual-release mechanism in one dosage form.
Effervescent Drug Absorption System (Efvdas): a technology for producing liquid formulations that effectively mask the taste of active drug compounds and that provide for faster absorption of drugs. This system may be used in conjunction with Elan's PharmaZone technology for controlled-release drugs.
Electrotransport Drug Administration System (Etdas): a delivery technology that enhances the therapeutic use of a wide range of drug compounds, including complex molecules developed through biotechnology.
Insoluble Drug Absorption System (Indas): a high-energy matrix tablet designed to improve water solubility and absorption characteristics of poorly soluble drugs.
Intestinal Protective Drug Absorption System (Ipdas): a specialized system using a multiparticulate high-density bead system developed to minimize the adverse gastrointestinal effects commonly experienced with some drug compounds such as non-steroidal anti-inflammatory agents.
Medipad: this transcutaneous technology uses minifusion with a minimally invasive probe to be used in the macromolecule delivery of narcotics, anticoagulants, and hormones. Medipad uses precise, controlled gas generation as the mechanism for delivery. Medipad has an adhesive backing and is lightweight enabling it to be worn in a similar manner to a transdermal patch.
Microparticulate Injectable Drug Absorption System (Midas): is a drug delivery technology that uses micro-matrix particles, each of which can be manufactured with appropriate dimensions and release characteristics, to deliver drugs. By combining particles of different rates in a single dose, varying delivery rates can be achieved over the dosing interval.
THIS IS AN EXCERPT: COPYRIGHT 1997 Engel Communications Inc.

TX Dermarlex: a passive transdermal patch system that employs a hydrogel matrix in which a pharmaceutical compound is incorporated.
Erythelan (**erythromycin**) oral suspension is awaiting U.S. marketing clearance for treating pediatric infections. This PharmaZone formulation of **erythromycin** allows the product to be administered half as often at half the dose with the same therapeutic effects and fewer adverse reactions than existing **erythromycin** products. Elan's technology also masks the antibiotic's unpleasant taste, making it easier for children to take.

L13 ANSWER 29 OF 59 PROMT COPYRIGHT 2003 Gale Group

AN 97:341308 PROMT
TI Double action Isotrexin Gel for acne
Offers Isotrexin Gel, a new acne treatment combining erythromycin and isotretinoin
SO Chemist & Druggist, (24 May 1997) pp. 8.
ISSN: 0009-3033.
LA English
WC 242
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB Stiefel has combined **erythromycin** and isotretinoin to form Isotrexin Gel, a new treatment for acne.
The product contains **erythromycin** 2 per cent w/w and isotretinoin 0.05 per cent w/w in a ready to use **alcoholic**

gel. The **macrolide** antibiotic reduces the population of *Propionibacterium acnes* found on the skin and prevents the release of inflammatory mediators from the bacteria, while the retinoid's anti-inflammatory action helps to treat the comedonal phase of acne (in other words blackheads and whiteheads).

Although resistance to topical **erythromycin** can occur, the combination of the antibiotic with isotretinoin has been found to be effective against resistant strains of *P acnes*.

Isotrexin is indicated for the topical treatment of mild to moderate acne *vulgaris*, both inflammatory and non-inflammatory lesions.

The gel should be applied sparingly over the affected area once or twice daily. Full therapeutic effect may not be seen until after six to eight weeks.

As with other products containing isotretinoin, use should be avoided in women who are breastfeeding or pregnant, or those trying to conceive. Local stinging, burning, irritation, erythema and peeling may be seen, but this should subside with continued use. However, if this persists, then treatment should be discontinued.

Isotrexin Gel is available from June in 30g tubes which last for about eight weeks (basic NHS price GBP8.75).

It does not have an in-use and has no special storage requirements such as refrigeration.

Stiefel Laboratories (UK) Ltd. Tel: 01628 524966.

THIS IS THE FULL TEXT: COPYRIGHT 1997 Morgan-Grampian Ltd. (UK)

Stiefel has combined **erythromycin** and isotretinoin to form Isotrexin Gel, a new treatment for acne.

The product contains **erythromycin** 2 per cent w/w and isotretinoin 0.05 per cent w/w in a ready to use **alcoholic** **gel**. The **macrolide** antibiotic reduces the population of *Propionibacterium acnes* found on the skin and prevents the release of inflammatory mediators from the. . .

Although resistance to topical **erythromycin** can occur, the combination of the antibiotic with isotretinoin has been found to be effective against resistant strains of *P. . .*

L13 ANSWER 30 OF 59 PROMT COPYRIGHT 2003 Gale Group

AN 97:472723 PROMT

TI Therapeutic products on the market improved through drug delivery

SO Med Ad News, (Aug 1997) pp. 38.

ISSN: 0745-0907.

LA English

WC 4039

FULL TEXT IS AVAILABLE IN THE ALL FORMAT

AB 17-beta estradiol patch has been approved in Ireland, South Korea, and the United Kingdom. The product is brand named Fematrix in the United Kingdom, where the product is marketed by licensee Solvay Healthcare Ltd. Fematrix is worn three to four or seven days as a hormone replacement therapy. The product has been submitted for approval in 12 other countries in Europe and Scandinavia. This patch was launched in the United Kingdom in April 1995.

Abelcet, a liposomal formulation of amphotericin B, was approved by U.S. regulators Oct. 18, 1996, for the treatment of invasive fungal infections, including candidiasis, cryptococcal meningitis, fusariosis, and zygomycosis, in patients who are refractory to or intolerant of conventional amphotericin B therapy. Abelcet also is approved for the second-line treatment of aspergillosis. The product is approved in 16 countries, including France, Italy, Spain, the United Kingdom, and the United States, for first-line or second-line treatment of systemic fungal infections. The product was developed and is marketed by The Liposome Company Inc. Laboratorios Esteve SA markets the product in Spain and Portugal.

ACT-3 brand of over-the-counter ibuprofen has been approved in Australia,

where it is being marketed by Wyeth-Ayerst Laboratories, a division of American Home Products Corp. The product was developed in an RP Scherersol formulation by R.P. Scherer Corp. Scherersol is a series of technically advanced, proprietary, and patented liquid formulation technologies for softgels that improve the bioavailability of drugs.

Actisite periodontal fiber, which uses the anti-infective tetracycline, was approved in the United States March 25, 1994, and launched July 19, 1994. The product is indicated as an adjunct to oral scaling and root pinning for the reduction of pocket depth and bleeding in patients with adult periodontitis. The product was jointly developed by Alza Corp. and On-Site Therapeutics Inc. Actisite is jointly marketed by Alza and The Procter & Gamble Co.

Acutrim, an osmotic phenylpropanolamine formulation, is a 16-hour, over-the-counter appetite suppressant sold by Novartis Consumer Health Inc. Sold in tablet form, Acutrim incorporates Alza Corp.'s Oros osmotic technology, which uses the principle of osmosis - the natural movement of water through a membrane. Acutrim was introduced by Novartis in September 1983 and is available only in the United States.

THIS IS AN EXCERPT: COPYRIGHT 1997 Engel Communications Inc.

TX Erythelan, a twice-daily formulation of **erythromycin**, will be launched in the United Kingdom this year, and marketed by Elan Pharma Ltd. Erythelan is awaiting marketing approval. . . .
PediaPatch, . . . delivery systems that remove warts, were developed by Lec-Tec Corp. Bradley Pharmaceuticals Inc. markets the products. The products use patented **hydrogel** dermal patch technology to provide the controlled-release, site-specific delivery of salicylic acid.

L13 ANSWER 31 OF 59 WPIDS (C) 2003 THOMSON DERWENT
AN 1997-267704 [24] WPIDS
DNN N1997-221807 DNC C1997-086135
TI Production of slow-release medicinal composition for the stomach - comprises lyophilising a fluid mixture of medicine, hydrogel-forming polymer and water optionally in pockets on synthetic resin sheet.
DC A11 A14 A25 A97 B07 P33
PA (MORP) MORISHITA ROUSSEL KK
CYC 1
PI JP 09095440 A 19970408 (199724)* 5p
ADT JP 09095440 A JP 1995-277032 19950929
PRAI JP 1995-277032 19950929
AB JP 09095440 A UPAB: 19970612
Production of slow-release compositions is by lyophilisation of a fluid mixture of a medicine, an **hydrogel**-forming polymer and water, optionally filled in multiple pockets formed on a synthetic resin sheet. Preferably composition contains 25-95 w/v% of water and 5-75 w/v% of **hydrogel**-forming polymer. The **hydrogel**-forming polymer is hydroxypropyl-cellulose, hydroxypropyl-methylcellulose, methylcellulose, PVA, carboxyvinyl copolymer, polyethylene oxide, pullulan and/or methacrylic acid copolymer.
Medicines which are rapidly eliminated from blood (e.g. acetaminophen and emorfazone), site specific absorbable medicine (e.g. furosemide and riboflavin) and locally-effective medicines (e.g. **roxithromycin** (RXM) and **clarithromycin** (CAM) are used to prepare the composition.

ADVANTAGE - The composition floats in stomach and slowly releases the effective ingredient(s).

In an example, a mixture of 150g. each of acetaminophen and hydroxypropylcellulose and 300g. of water was kneaded and filled in 0.6 ml. volume stick-type pockets made of synthetic resin and lyophilised to give the floating slow-release composition.

Dwg.0/1

AB . . . JP 09095440UPAB: 19970612
Production of slow-release compositions is by lyophilisation of a fluid mixture of a medicine, an **hydrogel**-forming polymer and water,

optionally filled in multiple pockets formed on a synthetic resin sheet.

Preferably composition contains 25-95 w/v% of water and 5-75 w/v% of hydrogel-forming polymer. The hydrogel-forming polymer is hydroxypropyl-cellulose, hydroxypropyl-methylcellulose, methylcellulose, PVA, carboxyvinyl copolymer, polyethylene oxide, pullulan and/or methacrylic acid copolymer.

Medicines which are rapidly eliminated from blood (e.g. acetaminophen and emorfazone), site specific absorbable medicine (e.g. furosemide and riboflavin) and locally-effective medicines (e.g. **roxithromycin** (RXM) and **clarithromycin** (CAM) are used to prepare the composition.

ADVANTAGE - The composition floats in stomach and slowly releases the effective ingredient(s).

. . .

L13 ANSWER 32 OF 59 CAPLUS COPYRIGHT 2003 ACS
AN 1997:285207 CAPLUS
DN 127:74804
TI Ferrite synthesis in microstructured media: template effects and magnetic properties
AU O'connor, C. J.; Buisson, Y. S. L.; Li, S.; Banerjee, S.; Premchandran, R.; Baumgartner, T.; John V. T.; McPherson, G. L.; Akkara, J. A.; Kaplan, D. L.
CS Dep. Chem., Univ. New Orleans, New Orleans, LA, 70148, USA
SO Journal of Applied Physics (1997), 81(8, Pt. 2A), 4741-4743
CODEN: JAPIAU; ISSN: 0021-8979
PB American Institute of Physics
DT Journal
LA English
AB Inverse micelles and **organogels** provide novel environments to synthesize ferrite particles. The fluid microstructure provides a template for the synthesis. The expts. with ferrite synthesis in inverse micelles indicate the formation of superparamagnetic nanoparticles. Of interest is the encapsulation of these particles in polymer microspheres. The encapsulation is done using simple polymer pptn. in the micellar nonsolvent. The process results in a polymer-ferrite composite exhibiting superparamagnetism. Low-temp. spin glass properties of the composite are characterized through SQUID measurements. These composites have a superparamagnetic blocking temp. of 16 K and follow the Curie-Weiss law at >60 K with the fitted parameters: C = 0.941 emu/g-K, .theta.= -287 K, and TIP = 0.0001 emu/g. Since the polymer used is polyphenol, a highly functionalizable material, the composite is well suited for applications in magnetic biosepsns. and magnetic coatings.
AB Inverse micelles and **organogels** provide novel environments to synthesize ferrite particles. The fluid microstructure provides a template for the synthesis. The expts. with ferrite synthesis in inverse micelles indicate the formation of superparamagnetic nanoparticles. Of interest is the encapsulation of these particles in polymer microspheres. The encapsulation is done using simple polymer pptn. in the micellar nonsolvent. The process results in a polymer-ferrite composite exhibiting superparamagnetism. Low-temp. spin glass properties of the composite are characterized through SQUID measurements. These composites have a superparamagnetic blocking temp. of 16 K and follow the Curie-Weiss law at >60 K with the fitted parameters: C = 0.941 emu/g-K, .theta.= -287 K, and TIP = 0.0001 emu/g. Since the polymer used is polyphenol, a highly functionalizable material, the composite is well suited for applications in magnetic biosepsns. and magnetic coatings.
L13 ANSWER 33 OF 59 CAPLUS COPYRIGHT 2003 ACS
AN 1997:218436 CAPLUS
DN 126:216644
TI Polyionic insoluble hydrogels comprising xanthan for use in controlled release of biologically active substances

IN Chornet, Esteban; Vidal, Pierre; Dumitriu, Severian
 PA Chornet, Esteban, Can.; Vidal, Pierre; Dumitriu, Severian
 SO Can. Pat. Appl., 52 pp.
 CODEN: CPXXEB
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CA 2146192	AA	19961004	CA 1995-2146192	19950403
	CA 2146192	C	19990406		
PRAI	CA 1995-2146192		19950403		

AB A method for the prepn. of insol. hydrogels from the complexation of polycations and xanthan is reported. Stable hydrogels capable of retaining between 65 and 95% wt. water were prep'd. particularly with chitosan and xanthan. The water retention and properties of the hydrogels were studied as a function of the degree of acetylation of chitosan and the ratio chitosan/xanthan used in the prepn. of the gel. The chitosan-xanthan complex was used to immobilize biol. material. Hydrogels contg. enzymes (for example endo-1,4-.beta.-xylanase and protease) either as single enzymes or as a binary system have been prep'd. Immobilization varied between 85 and 98%. The immobilized xylanase activity was significantly greater with respect to the free enzyme while the binary enzyme system promoted protease activity. Other hydrogels prep'd. with polybasic drugs complexed to xanthan with or without chitosan have been prep'd. These complexes slowly dissoc. in acidic media and provide for sustained release of compds. in near neutral pHs. Gels contg. chitosan are stable in all physiol. pHs and the immobilized mols. are released therefrom by diffusion.

IT 56-54-2, Quinidine 56-75-7, Chloramphenicol 60-54-8, Tetracycline 69-53-4, Ampicillin 72-14-0, Sulfathiazole 79-57-2, Oxytetracycline 114-07-8, **Erythromycin** 443-48-1, Metronidazole 1394-02-1, Trichomycin 1403-66-3, Gentamycin 1404-04-2, Neomycin 1404-90-6, Vancomycin 1406-05-9, Penicillin 8063-07-8, Kanamycin 11056-06-7, Bleomycin 11111-12-9, Cephalosporin 12706-94-4, Anthelmycin 18378-89-7, Mithramycin 20830-81-3, Daunorubicin 32385-11-8 66676-88-8, Aclacinomycin 76174-56-6, Adenomycin 187951-48-0, Enzomycin A 187951-59-3, Orthomycin
 RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (encapsulation of; polyionic insol. **hydrogels** comprising xanthan for use in controlled release of biol. active substances)

L13 ANSWER 34 OF 59 WPIDS (C) 2003 THOMSON DERWENT
 AN 1996-518668 [51] WPIDS
 DNC C1996-162906
 TI Novel soln. or gel comprising silica and alginate - can encapsulate microorganisms and can be used to remove pollutants from air, ground water or soil e.g. chlorinated hydrocarbon(s).

DC A41 C07 D15 D16 E19
 IN BISHOP, D; GOVIND, R
 PA (UYCI-N) UNIV CINCINNATI; (USSI) US ENVIRONMENTAL PROTECTION AGENCY
 CYC 19
 PI WO 9635780 A1 19961114 (199651)* EN 21p
 RW: AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE
 W: CA JP

ADT WO 9635780 A1 WO 1996-US6765 19960510
 PRAI US 1995-439973 19950512
 AB WO 9635780 A UPAB: 19961219
 A novel compsn. comprises a soln. contg. silica sol and alginate, or a gel contg. silica and alginate, wt. ratio alginate:silica is (1-10):(90-99).
 The soln. contains 1-10% biomass. The gel contains microorganisms; it is in form of a bead, plate of gel or a thread. **Hydrogel**

compsns. are provided which encapsulate bacteria and simultaneously create oxic (oxygen-rich) and anoxic zones making it possible to mineralise chlorinated cpds. e.g. TCE and perchloroethylene (PCE), using organic sources, e.g. electron donors such as formate, for anaerobic microbial dehalogenation; zero valent metal, e.g. Fe or Al can be introduced into the anoxic zone to partially dehalogenate polychlorinated cpds.

USE - The gel is of use as support for microorganisms; the combination is of use for removing pollutants from the environment, e.g. from air, ground water or soil. Pollutants may be chlorinated hydrocarbons, e.g. carbon tetrachloride, trichloroethylene(TCE), chloroform, methylene chloride, vinyl chloride and chlorinated ethanes. Contaminants that do not degrade aerobically, e.g. DDT and PCB's, can be treated using gel beads.

ADVANTAGE - The gels provides suitable voids for growth and maintenance of active cells, and are sufficiently stable for use in biofilters. They do not dissolve in water. They can encapsulate microorganisms.

Dwg.0/0

AB

contains 1-10% biomass. The gel contains microorganisms; it is in form of a bead, plate of gel or a thread. **Hydrogel** compsns. are provided which encapsulate bacteria and simultaneously create oxic (oxygen-rich) and anoxic zones making it possible to mineralise chlorinated cpds. e.g. TCE and perchloroethylene (PCE), using organic sources, e.g. electron donors such as formate, for anaerobic microbial dehalogenation; zero valent metal, e.g. Fe or Al. . . .

L13 ANSWER 35 OF 59 CAPLUS COPYRIGHT 2003 ACS

AN 1996:452220 CAPLUS

DN 125:117909

TI In Situ Preparation of Nanocrystalline γ -Fe₂O₃ in Iron(II) Cross-Linked Alginate Gels

AU Kroll, Elizabeth; Winnik, Francoise M.; Ziolo, Ronald F.

CS Department of Chemistry, McMaster University, Hamilton, ON, L8S 4M1, Can.

SO Chemistry of Materials (1996), 8(8), 1594-1596

CODEN: CMATEX; ISSN: 0897-4756

PB American Chemical Society

DT Journal

LA English

AB Nanocryst. particles of maghemite, (γ -Fe₂O₃), were formed in alginate gels by the alk. oxidn. of the crosslinking agent, iron(II), used to bind the linear polysaccharide chains of the **hydrogel**. The integrity of the gels remains intact upon formation of (γ -Fe₂O₃), suggesting participation of the nanocryst. particulate in the crosslinking. The gels were isolated as 2-mm beads contg. from 0.5-5.5% by wt. iron as detd. by elemental anal. and from 10-50% Fe in the dehydrated form. Methanol was used as an inhibitor of alginate depolymn. during the alk. oxidn. At room temp., the dehydrated gels are magnetic with satn. magnetizations in excess of 30 emu g⁻¹ at 20 kOe.

TEM micrographs of sectioned **hydrogel** beads revealed the presence of spherical nanocrystals with diams. ranging from 4 nm to 15 nm, identified as maghemite by x-ray and electron diffraction. Magnetization vs. applied field curves recorded at room temp. suggest superparamagnetic behavior for the gels with no observable hysteresis.

AB Nanocryst. particles of maghemite, (γ -Fe₂O₃), were formed in alginate gels by the alk. oxidn. of the crosslinking agent, iron(II), used to bind the linear polysaccharide chains of the **hydrogel**. The integrity of the gels remains intact upon formation of (γ -Fe₂O₃), suggesting participation of the nanocryst. particulate in the crosslinking. The gels were isolated as 2-mm beads contg. from 0.5-5.5% by wt. iron as detd. by elemental anal. and from 10-50% Fe in the dehydrated form. Methanol was used as an inhibitor of alginate depolymn.

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L13 ANSWER 36 OF 59 MEDLINE
AN 97052641 MEDLINE
DN 97052641 PubMed ID: 8897275
TI Topical delivery of erythromycin from various formulations: an in vivo hairless mouse study.
AU Jayaraman S C; Ramachandran C; Weiner N
CS College of Pharmacy, University of Michigan, Ann Arbor 48109-1065, USA.
SO JOURNAL OF PHARMACEUTICAL SCIENCES, (1996 Oct) 85 (10) 1082-4.
Journal code: 2985195R. ISSN: 0022-3549.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199702
ED Entered STN: 19970306
Last Updated on STN: 19970306
Entered Medline: 19970226
AB Topical products containing **erythromycin**, a **macrolide** antibiotic with poor aqueous solubility, are usually formulated as high **alcohol** content solutions or **gels**. In this study, we evaluated the deposition of **erythromycin** base into various strata of hairless mouse skin following topical in vivo application from various low- and nonalcoholic formulations. The formulations tested included nonionic liposomal formulation composed of glyceryl dilaurate, cholesterol, and polyoxyethylene-10-stearyl either at a weight ratio of 57:15:28, two nonionic oil-in-water (o/w) liposomal emulsions containing isopropyl myristate or light mineral oil as the oil phase, a conventional o/w emulsion, a 40% hydroalcoholic solution, and two commercially available topical products. Eight hours after topical administration of these formulations, the efficiency of uptake of **erythromycin** into the living skin strata was in the order: liposomal isopropyl myristate emulsion > > liposomal mineral oil emulsion > > nonionic liposomes approximately **Emgel** approximately **Theramycin-Z** > > conventional emulsion > > hydroalcoholic solution. Alcohol-free liposomal systems are shown to be as efficient as high alcohol content products in facilitating permeation of **erythromycin** through the stratum corneum into living skin tissue.
AB Topical products containing **erythromycin**, a **macrolide** antibiotic with poor aqueous solubility, are usually formulated as high **alcohol** content solutions or **gels**. In this study, we evaluated the deposition of **erythromycin** base into various strata of hairless mouse skin following topical in vivo application from various low- and nonalcoholic formulations. The . . . solution, and two commercially available topical products. Eight hours after topical administration of these formulations, the efficiency of uptake of **erythromycin** into the living skin strata was in the order: liposomal isopropyl myristate emulsion > > liposomal mineral oil emulsion > > nonionic liposomes approximately **Emgel** approximately **Theramycin-Z** > > conventional emulsion > > hydroalcoholic solution. Alcohol-free liposomal systems are shown to be as efficient as high alcohol content products in facilitating permeation of **erythromycin** through the stratum corneum into living skin tissue.

L13 ANSWER 37 OF 59 WPIDS (C) 2003 THOMSON DERWENT
AN 1995-098554 [13] WPIDS
DNC C1995-044833
TI Sustained release ocular drug delivery compsn. - comprising aq. suspension of drug-contg. crosslinked hydrogel microspheres, giving reliable delivery without irritation.
DC A14 A96 B07
IN JUNGHERR, L B; OTTOBONI, T B; YAMAMOTO, R K; OTTOBONI, T
PA (VITA-N) VITAPHORE CORP
CYC 57
PI WO 9505161 A1 19950223 (199513)* EN 31p
RW: AT BE CH DE DK ES FR GB GR IE IT KE LU MC MW NL OA PT SD SE
W: AM AT AU BB BG BR BY CA CH CN CZ DE DK ES FI GB GE HU JP KE KG KP
KR KZ LK LT LU LV MD MG MN MW NL NO NZ PL PT RO RU SD SE SI SK TJ
TT UA UZ VN
AU 9476688 A 19950314 (199525)
EP 664699 A1 19950802 (199535) EN
R: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE
US 5731005 A 19980324 (199819) 9p
ADT WO 9505161 A1 WO 1994-US8319 19940811; AU 9476688 A AU 1994-76688
19940811; EP 664699 A1 EP 1994-927151 19940811, WO 1994-US8319 19940811;
US 5731005 A Div ex US 1993-106287 19930813, US 1995-475590 19950606
FDT AU 9476688 A Based on WO 9505161; EP 664699 A1 Based on WO 9505161
PRAI US 1993-106287 19930813; US 1995-475590 19950606
AB WO 9505161 A UPAB: 19950404
A sustained-release drug delivery compsn. (A) comprises: (a) an aq. carrier contg. a drug (I) with a pH and osmotic pressure acceptable to the eye; and (b) crosslinked **hydrogel** microspheres (MSP) contg. (I), where MSP have a binding affinity of at least 0.8 for (I). A method of sustained delivery of (I) to the eye, by applying (A) to the eye, is claimed. Also claimed are methods of prepn. of **hydrogel** microspheres (MSP') useful as a drug delivery system, by: (1) forming MSP' in an emulsion by combining water-soluble macromolecules (II) with a surfactant in water and a water-immiscible organic solvent, then diluting the emulsion with sufficient water-insoluble organic solvent (III) to prevent aggregation of MSP'; or (2) spray-drying a soln. contg. (II) to form MSP', then mixing MSP' with (III) to prevent aggregation. Both processes opt. further include contacting MSP' with a crosslinking agent.
USE - (A) are useful for admin. of ocular (I) such as antibiotics (e.g. tetracycline, neomycin, polymycin, gramicidin, gentamicin, tobramycin, trimethoprim, chloramphenicol, bacitracin or **erythromycin**), antibacterials (e.g. sulphonamides, sulfacetamide, sulfamethazole or sulfisoxazole), antivirals, antiinflammatories (e.g. hydrocortisone, dexamethasone, fluocinolone, fluorometholone or triamainolone), cholinergics and anticholinesterases (e.g. pilocarpine, eserine salicylate, carbachol or demecarium bromide), mydriatics (e.g. atropine sulphate, scopolamine, tropicamide or hydroxyamphetamine), sympathomimetics (e.g. epinephrine), beta-blockers (e.g. beta-colol, levobunolol, metipranol, adaprolol, alprenoxime, carteolol or timolol) or other drugs (e.g. acetazolamide, apraclonidine, methazolamide, PGF2alpha-IE, PGA2-IA, sulprostone or verapamil).
ADVANTAGE - MSP adhere to mucin, esp. to the proteoglycans of the mucosal surfaces, and are retained in the tear film for sufficient time to complete release of (I) (before being swept out by the normal turnover of mucin). They have small size and soft texture, and are thus non-irritating to the eye. (A) is a reliable system for extended delivery of (I) to the tear film and other mucosal surfaces in a convenient MSP suspension drop form. There is no blurring of vision (as with ointments or gels), and (A) is more comfortable to the eye than ocular inserts. MSP actively bind to (I), can be loaded with a higher concn. of (I) than the surrounding liq. carriers and can be loaded with (I) after formation (allowing sterilisation before adding (I)).

AB . . .
an aq. carrier contg. a drug (I) with a pH and osmotic pressure acceptable to the eye; and (b) crosslinked **hydrogel** microspheres (MSP) contg. (I), where MSP have a binding affinity of at least 0.8 for (I). A method of sustained. . . of (I) to the eye, by applying (A) to the eye, is claimed. Also claimed are methods of prepn. of **hydrogel** microspheres (MSP') useful as a drug delivery system, by: (1) forming MSP' in an emulsion by combining water-soluble macromolecules (II). . . useful for admin. of ocular (I) such as antibiotics (e.g. tetracycline, neomycin, polymycin, gramicidin, gentamicin, tobramycin, trimethoprim, chloramphenicol, bacitracin or **erythromycin**), antibacterials (e.g. sulphonamides, sulfacetamide, sulfamethazole or sulfisoxazole), antivirals, antiinflammatories (e.g. hydrocortisone, dexamethasone, fluocinolone, fluorometholone or triamainolone), cholinergics and anticholinesterases (e.g.. . .

ABEQ. . .
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L13 ANSWER 38 OF 59 WPIDS (C) 2003 THOMSON DERWENT
AN 1994-332293 [41] WPIDS
DNC C1994-151102
TI Enteric coating compsn for controlled release - comprises polymer blend contg cellulose acetate phthalate and opt trimellitate, esp. for drug delivery.
DC A96 B07 C07
IN GREENE, C J; KASHDAN, D S; KIRK, S K; WU, S H
PA (EAST) EASTMAN CHEM CO
CYC 1
PI US 5356634 A 19941018 (199441)* 23p
ADT US 5356634 A US 1992-975758 19921113
PRAI US 1992-975758 19921113
AB US 5356634 A UPAB: 19941206
Enteric coating compsn. (I) comprises a blend of: (a) a cellulose acetate phthalate polymer (CAP) having phthalyl value 15-25%, inherent viscosity 0.3-1.0 g/dl and mol.wt. of 15000-75000; and (b) a CAP having phthalyl value of 10-40 (pref. 28-40)% or a cellulose acetate trimellitate polymer (CAT) having trimellityl value of 15-27 (pref. 17-25)%.

Also claimed are: a method of treating an animal by admin. of an active ingredient (A) in tablet or granular form, coated with (I) (provided that if (b) is CAP, the phthalyl value is 28-40%); and medicament in tablet or granular form, coated with (I).

USE - (I) swells to form a gel in basic media (e.g. gastrointestinal fluids), and is useful as coating for granular or tabletted medicaments to provide slow release of (A). (I) may also be used as coatings to provide controlled release of other bioactive materials, e.g. cosmetic ingredients, agrochemicals and agents for increasing wt. gain or feed conversion of farm animals. Typical medicaments (A) (pref. for oral admin.) are adrenocortical steroid inhibitors, analgesics (e.g. aspirin, acetaminophen, ibuprofen, codeine or morphine), anorexics (of amphetamine or other types), anti-alcohol preps., antiarthritics, anti-gout preps.,

antiinfectives (e.g. **erythromycin**, cephalexin, cefaclor, ampicillin or amoxicillin), antivirals, antiprotozoals, anthelmintics and alpha- or beta-adrenergic blockers.

ADVANTAGE - (I) provide pH-sensitive **hydrogels**, giving a desirable release profile of (A) in an environment according to the pH.
Dwg.1/18

AB

(e.g. aspirin, acetaminophen, ibuprofen, codeine or morphine), anorexics (of amphetamine or other types), anti-alcohol preps., antiarthritics, anti-gout preps., antiinfectives (e.g. **erythromycin**, cephalexin, cefaclor, ampicillin or amoxicillin), antivirals, antiprotozoals, anthelmintics and alpha- or beta-adrenergic blockers.

ADVANTAGE - (I) provide pH-sensitive **hydrogels**, giving a desirable release profile of (A) in an environment according to the pH.
Dwg.1/18

L13 ANSWER 39 OF 59 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 4
AN 1994:517539 CAPLUS
DN 121:117539
TI In vitro release of **erythromycin** from **hydrogels**
AU Ates, Selma; Tuncel, Tulin; Otuk, Gulten
CS Fac. Pharm., Univ. Istanbul, Turk.
SO Pharmazie (1994), 49(6), 459-60
CODEN: PHARAT; ISSN: 0031-7144
DT Journal
LA English
AB The release rate of **erythromycin** from **hydrogels** was in the following decreasing order: hydroxyethyl cellulose, hydroxypropyl Me cellulose, Na CM-cellulose, Carbopol 934, and simple ointment.
TI In vitro release of **erythromycin** from **hydrogels**
AB The release rate of **erythromycin** from **hydrogels** was in the following decreasing order: hydroxyethyl cellulose, hydroxypropyl Me cellulose, Na CM-cellulose, Carbopol 934, and simple ointment.
ST **erythromycin** release **hydrogel**
IT Solution rate
 (of **erythromycin**, from **hydrogels**)
IT Pharmaceutical dosage forms
 (**hydrogels**, topical, **erythromycin** release from)
IT 9004-32-4, Na CM-cellulose 9004-62-0, Hydroxyethyl cellulose 9004-65-3, Hydroxypropyl methyl cellulose 9007-16-3, Carbopol 934
RL: BIOL (Biological study)
 (**hydrogel** base, **erythromycin** release from)
IT 114-07-8, **Erythromycin**
RL: PROC (Process)
 (release of, from **hydrogels**)

L13 ANSWER 40 OF 59 CAPLUS COPYRIGHT 2003 ACS
AN 1994:587102 CAPLUS
DN 121:187102
TI Evaluation of temperature-sensitive and drug dissolution properties of polyvinylacetal diethylaminoacetate gel
AU Shimano, Kimihide; Kondo, Osamu; Miwa, Akio; Higashi, Yoshie; Koyama, Ikuo; Yoshida, Tsuguchika; Ito, Yutaka; Hirose, Jun; Goto, Shigeru
CS Research Center, Taisho Pharmaceutical Co., Ltd., Omiya, 330, Japan
SO Yakuzaigaku (1994), 54(2), 69-76
CODEN: YAKUA2; ISSN: 0372-7629
DT Journal
LA Japanese
AB Polyvinylacetal diethylaminoacetate (AEA), which is sol. in gastric juice and org. solvents but is practically insol. in purified water, has been used as a coating polymer to prevent water entry into tablets and to mask drug bitterness. However, AEA dissolves in cold water, and as temp. is increased, the AEA in aq. soln. coagulates hydrophobically to form

hydrogel. Therefore, in order to improve the unpleasant taste of a bitter drug, these unique properties of AEA were used to study the thermo shrinking and drug dissoln. properties of gel hemispheres which were 2.5 cm in diam. and prep'd. from AEA aq. soln. In all runs, the wt. ratio of AEA and water in mother liquor was kept const. at 10:90, and drug content was varied from 0 to 10 wt%. **Clarithromycin** (CAM), a new **macrolide** antibiotic, was used as a model drug with bitter taste. For all of the AEA gels, degree of shrinkage depended on temp. and time of soaking. At 80.degree.C soaking temp., after one day AEA gel had shrunk to about 10 wt% of its wt. before soaking. About 97 wt% of the water in the mother liquor was released from AEA gel due to shrinkage (syneresis) at 80.degree.C. However, these AEA gels subsequently became swollen after three days at 80.degree.C. The amts. of CAM dissoln. from AEA gel increased with increasing soaking time below 50.degree.C, but a smaller and const. amt. of CAM dissoln. was obtained above 80.degree.C between 2 and 120 min soaking time. CAM content in AEA gel varied inversely with CAM dissoln. at 40.degree.C and 80.degree.C soaking temps. However, CAM dissoln. from AEA gel was not affected by either the concn. of CAM dissolved in mother liquor or the drying temp. conditions tested. These findings indicate that in control of CAM dissoln. from AEA gel and masking of the taste of a bitter drug, the ratio of CAM content in AEA suspension and temp. used to from AEA gel each significantly affect the degree of microencapsulation.

AB Polyvinylacetal diethylaminoacetate (AEA), which is sol. in gastric juice and org. solvents but is practically insol. in purified water, has been used as a coating polymer to prevent water entry into tablets and to mask drug bitterness. However, AEA dissolves in cold water, and as temp. is increased, the AEA in aq. soln. coagulates hydrophobically to form **hydrogel**. Therefore, in order to improve the unpleasant taste of a bitter drug, these unique properties of AEA were used to study the thermo shrinking and drug dissoln. properties of gel hemispheres which were 2.5 cm in diam. and prep'd. from AEA aq. soln. In all runs, the wt. ratio of AEA and water in mother liquor was kept const. at 10:90, and drug content was varied from 0 to 10 wt%. **Clarithromycin** (CAM), a new **macrolide** antibiotic, was used as a model drug with bitter taste. For all of the AEA gels, degree of shrinkage depended on temp. and time of soaking. At 80.degree.C soaking temp., after one day AEA gel had shrunk to about 10 wt% of its wt. before soaking. About 97 wt% of the water in the mother liquor was released from AEA gel due to shrinkage (syneresis) at 80.degree.C. However, these AEA gels subsequently became swollen after three days at 80.degree.C. The amts. of CAM dissoln. from AEA gel increased with increasing soaking time below 50.degree.C, but a smaller and const. amt. of CAM dissoln. was obtained above 80.degree.C between 2 and 120 min soaking time. CAM content in AEA gel varied inversely with CAM dissoln. at 40.degree.C and 80.degree.C soaking temps. However, CAM dissoln. from AEA gel was not affected by either the concn. of CAM dissolved in mother liquor or the drying temp. conditions tested. These findings indicate that in control of CAM dissoln. from AEA gel and masking of the taste of a bitter drug, the ratio of CAM content in AEA suspension and temp. used to from AEA gel each significantly affect the degree of microencapsulation.

L13 ANSWER 41 OF 59 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 5
AN 1994:116881 CAPLUS
DN 120:116881
TI Use of hydrogels to fix orthopedic fasteners and bone replacements
IN Nicolais, Luigi; Ambrosio, Luigi; Netti, Paolo Antonio; Callegaro, Lanfranco
PA Italian Ministry for Universities and Scientific and Technological, Italy
SO PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DT Patent
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9323094	A1	19931125	WO 1993-EP1288	19930521
	W: AU, BB, BG, BR, CA, CZ, FI, HU, JP, KP, KR, KZ, LK, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SK, UA, US, VN				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9343162	A1	19931213	AU 1993-43162	19930521
	EP 642363	A1	19950315	EP 1993-912762	19930521
	EP 642363	B1	20011004		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	AT 206316	E	20011015	AT 1993-912762	19930521
PRAI	IT 1992-PD88	A	19920520		
	IT 1992-PD8	A	19920520		
	WO 1993-EP1288	A	19930521		
AB	Orthopedic fasteners and replacements such as nails are coated with hydrogels and other biocompatible/biodegradable materials which expand in the presence of liqs. Swelling of such coatings causes the fastener or replacement to be securely fixed into position once inserted into bone material. Also provided is a method for fixing a bone or bone replacement in position employing such coated orthopedic fasteners or replacements. Surgical Ti pins, 30mm long, were coated with a poly(Me methacrylate) to obtain thickness of .apprx. 0.5mm. The pins were coated with ethylene dimethacrylate and hydroxyethyl methacrylate and polymd. at 80.degree.. The pins were placed in water at 40.degree. for 48 hs and the interfacial strength was measured and proved to be close to the shear strength of the hydrogel in the swollen state (3MPa).				
IT	Antibiotics (macrolide, hydrogels contg., for coating of orthopedic fasteners)				
IT	54-42-2, Iododeoxyuridine 55-56-1, Chlorhexidine 57-62-5, Aureomycin 57-92-1, Streptomycin, biological studies 59-01-8, Kanamycin 59-87-0, Nitrofurazone 70-00-8, Trifluorothymidine 79-57-2, Oxytetracyclin 90-89-1, Diethylcarbamazine 114-07-8 , Erythromycin 126-07-8, Griseofulvin 128-46-1, Dihydrostreptomycin 138-39-6, Mafenide 148-24-3D, 8-Hydroxyquinoline, derivs. 303-81-1, Novobiocin 751-97-3, Rolitetracycline 1397-89-3, Amphotericin b 1400-61-9, Nystatin 1403-66-3, Gentamycin 1404-04-2, Neomycin 1404-26-8, Polymyxin b 1404-55-3, Ristocetin 1404-90-6, Vancomycin 1405-87-4, Bacitracin 1405-97-6, Gramicidin 1695-77-8, Spectinomycin 3922-90-5, Oleandomycin 4564-87-8, Carbomycin 5536-17-4, Adenine arabinoside 7803-58-9, Sulfamide 8025-81-8, Spiramycin 15176-29-1, 5-Ethyldeoxyuridine 18323-44-9, Clindamycin 31431-39-7, Mebendazole 32986-56-4, Tobramycin 37517-28-5, Amikacin 56045-73-9, 5-Iodo-5'-amino-2',5'-dideoxyuridine 59277-89-3, Acyclovir 69304-47-8, Bromovinyldeoxyuridine RL: BIOL (Biological study) (hydrogels contg., for coating of orthopedic fasteners)				
L13	ANSWER 42 OF 59 WPIDS (C) 2003 THOMSON DERWENT				
AN	1991-171161 [23] WPIDS				
DNC	C1991-074025				
TI	Topical compsn. for acne treatment used with tretinoin - contains UV absorber, erythromycin antibacterial agent and carrier.				
DC	A96 B03 B05 D21				
IN	BREUNIG, C F; STIEFEL, W K				
PA	(STIE) STIEFEL LAB INC				
CYC	1				
PI	US 5017366 A 19910521 (199123)*				
ADT	US 5017366 A US 1990-522648 19900514				
PRAI	US 1988-291670 19881229; US 1990-522648 19900514				
AB	US 5017366 A UPAB: 19930928				

Topical compsn. comprises (a) at least one acceptable UV absorber (I), (b) **erythromycin** (II) and (c) an acceptable carrier, is an **alcoholic gel** vehicle, esp. 3.8% hydroxypropylcellulose (HPC) in EtOH. (I) is at least one of alkyl p-dimethylaminobenzoate (Ia) and/or 2-hydroxybenzophenone deriv. (Ib). (II) is 1.5-3 wt. % of the compsn.

Pref. (Ia) is octyl p-dimethylaminobenzoate (A) and (Ib) is 2-hydroxy-4-methoxybenzophenone (B) opt. used together. Also suitable as (I) are butyl-methoxydibenzoylmethane (Ic) and octyl methoxycinnamate (Id) both esp. used together with (B).

USE/ADVANTAGE - Compsn. is used as adjuvant in (iso)tretinoin therapy of acne. Pref. tretinoin is applied in the evening and above compsn. (which provides antibacterial and sunscreening activates) in the following morning.

0/0

AB US 5017366 UPAB: 19930928
Topical compsn. comprises (a) at least one acceptable UV absorber (I), (b) **erythromycin** (II) and (c) an acceptable carrier, is an **alcoholic gel** vehicle, esp. 3.8% hydroxypropylcellulose (HPC) in EtOH. (I) is at least one of alkyl p-dimethylaminobenzoate (Ia) and/or 2-hydroxybenzophenone deriv. (Ib)...

L13 ANSWER 43 OF 59 CAPLUS COPYRIGHT 2003 ACS

AN 1990:558717 CAPLUS

DN 113:158717

TI Sustained-release formulation containing an ion-exchange resin

IN Bawa, Rajan; Ruscio, Dominic V.

PA Bausch and Lomb Inc., USA

SO U.S., 8 pp. Cont. of U.S. Ser. No. 766,605, abandoned.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4931279	A	19900605	US 1988-224199	19880721
PRAI	US 1985-766605		19850816		

AB A drug is incorporated into crosslinked hydrophilic polymer contg. an ion-exchange resin. This dosage form is suitable for topical, systemic or transdermal administration. Contact lenses may be prep'd. from this materials, which allow for sustained drug release into the eye. A mixt. of 84.59 g 2-hydroxyethyl methacrylate, 14.9 g glycerol, 0.34 g ethylene glycol dimethacrylate, 0.17 g benzoin Me ether and 50 mg ion-exchange resin (divinylbenzene-crosslinked carboxylated styrene) beads was UV-irradiated in a contact lens mold. The polymer lens obtained was soaked in aq. 4% pilocarpine-HCl soln. for 24 h, to give a lens which also functions as a sustained-release device.

IT 50-02-2, Dexamethasone 50-23-7, Hydrocortisone 50-24-8, Prednisolone 51-34-3, Scopolamine 51-43-4, Epinephrine 51-83-2, Carbachol 54-42-2, Idoxuridine 54-71-7, Pilocarpine hydrochloride 55-63-0, Nitroglycerin 55-91-4 56-75-7 56-94-0 57-47-6, Eserine 57-62-5 59-42-7, Phenylephrine 60-54-8, Tetracycline 61-33-6, biological studies 79-57-2, Oxytetracycline 83-43-2, Methyl prednisolone 87-00-3, Homatropine 92-13-7, Pilocarpine 114-07-8, **Erythromycin** 124-94-7, Triamcinolone 144-80-9, Sulfacetamide 302-79-4, Retinoic acid 378-44-9 426-13-1 512-15-2, Cyclopentolate 674-38-4, Bethanechol 807-38-5 1403-66-3, Gentamycin 1404-04-2, Neomycin 1404-26-8, Polymyxin B 1405-87-4, Bacitracin 1405-97-6, Gramicidin 1406-11-7, Polymyxin 2668-66-8, Medrysone 6736-03-4, Phospholine 16110-51-3, Cromolyn 26839-75-8, Timolol 32986-56-4, Tobramycin

RL: BIOL (Biological study)

(sustained-release form of, in **hydrogel** polymer)

L13 ANSWER 44 OF 59 CAPLUS COPYRIGHT 2003 ACS

AN 1989:121426 CAPLUS

DN 110:121426

TI Antimicrobial compositions containing hydrogels, methacrylic polymers, and solubilizers for application to mucous membranes

IN Kita, Kazuyoshi; Asai, Noriyuki; Hasegawa, Kenji; Iida, Seiichi; Ota, Masako

PA Sunstar, Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 63130541	A2	19880602	JP 1986-274803	19861118
	JP 05072893	B4	19931013		

PRAI JP 1986-274803 19861118

AB Antimicrobial compns. contain (1) hydrogels consisting of sol. polymers and polyhydric alcs., (2) methacrylic copolymers selected from the group comprising aminoalkyl methacrylate copolymer E, aminoalkyl methacrylate copolymer RS, or mixts. thereof, (3) solubilizing agents for methacrylic acid copolymers but not for the polyhydric alcs., and (4) local microbicides and their pharmaceutically acceptable salts, with the wt. ratio of the methacrylic acid copolymers to solubilizers being 1:2-1:25. A formulation consisted of cetylpyridinium chloride 5, hydroxyethyl cellulose 4, glycerin 77, triacetin 12, and Eudragit RS 2% by wt. A slow release of the bactericide from this formulation was demonstrated in vitro.

IT Antibiotics

(**macrolide**, topical pharmaceuticals contg. acrylic polymers and **hydrogels** and)

L13 ANSWER 45 OF 59 CAPLUS COPYRIGHT 2003 ACS

AN 1988:496892 CAPLUS

DN 109:96892

TI Manufacture of ferromagnetic metal powders

IN Sudo, Kazufuyu; Oshima, Kazufumi; Tagawa, Kimiteru

PA Mitsui Toatsu Chemicals, Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 63062803	A2	19880319	JP 1986-205103	19860902
	JP 06076607	B4	19940928		

PRAI JP 1986-205103 19860902

AB The metal powders esp. for magnetic recording medium are manufd. by coating fine metal powders (Fe or Fe compd.) with Al-base **hydrogel** or amorphous compd. contg. .gt;0.1% P, Si, or Ni and by heating the coated powders at 90-130.degree. and <10 atm. The ferromagnetic metal powders are also manufd. by suspending fine metal powders in an org. solvent, adding an org. Al compd. to coat the powders, adding a poor solvent to accelerate gelation of the coated Al compd., and redn. Thus, an acicular FeO(OH) from FeSO4 and NaOH was dild. with water, stirred (pH 10), and coated with a mixt. contg. Na hexametaphosphate, water glass, Na aluminate, and Ni nitrate (P:Fe = 0.4:100, Si:Fe = 0.1:100, Al:Fe = 4.0:100, and Ni:Fe = 3.0:100). After adjusting pH to 8 with HNO3, the slurry was boiled at 98.degree. for 5 h, filtered, rinsed, dried at 120.degree. for 18 h, and pulverized. The coated Fe(OH) powder was heated

in N at 500.degree. for 4 h and in H at 450.degree. for 6 h. The reduced powder was finally immersed into PhMe and dried in an air. The resp. coercive force, satn. magnetization, and sp. surface area of the obtained powder were 1500 Oe, 135 **emu/g**, and 53.2 m²/g vs. 1280 Oe, 122 **emu/g**, and 50.5 m²/g for a similarly prep'd. powder without boiling. The magnetic Fe powder prep'd. according to the invention had excellent corrosion (oxidn.) resistance at 80% relative humidity and 50.degree. for 60 h and high affinity with synthetic resin in a PhMe-50% MEK mixt. for 24 h.

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L13 ANSWER 46 OF 59 WPIDS (C) 2003 THOMSON DERWENT
 AN 1988-316189 [45] WPIDS
 DNC C1988-139645
 TI Antibacterial compsn. for topical administration - contg. antibacterial cpd., non-water soluble polymeric compsn., plasticiser and solvent.
 DC A96 B05 E17
 IN HSU, C C; HUI, H W; VADNERE, M K
 PA (ABBO) ABBOTT LAB
 CYC 13
 PI EP 289900 A 19881109 (198845)* EN 7p
 R: BE CH DE ES FR GB GR IT LI NL SE
 JP 63307815 A 19881215 (198905)
 US 5082656 A 19920121 (199206)
 ADT EP 289900 A EP 1988-106593 19880425; JP 63307815 A JP 1988-107455
 19880427; US 5082656 A US 1989-444491 19891201
 PRAI US 1987-44521 19870430; US 1987-108175 19871013
 AB EP 289900 A UPAB: 19930923
 An antibacterial compsn. for topical admin. comprises (a) 0.5-10% of an antibacterial cpd. (I), (b) 1-30% of a non water soluble polymeric compsn. (II), (c) 0.5-40% of a plasticiser (III) which plasticises (II), and (d) 50-95% of a solvent in which (II) and (III) are dissolved. Upon topical admin. of the compsn. the solvent will evaporate or penetrate the skin and leave a thin protective film of polymeric compsn. which retains the antibacterial cpd. against the skin.

Pref. (I) is erythromycin. Pref. (II) are peppermint oil, eucalytol oil, geranyl acetate, or geraniol. (III) is pref. ethylcellulose, vinylpyrrolidone, polymethyl vinyl ether/maleic acid polymers or copolymers of polyvinyl pyrrolidone and hexadecene.

USE/ADVANTAGE - The topical antibacterial compsn. effectively penetrates the skin while at the same time the compsns. resists washing and wear. The plasticiser makes the dried film flexible so it will resist

cracking.

0/0

ABEQ US 5082656 UPAB: 19930923

Topical antibacterial compsn. comprises 0.5-10 % of antibacterial (**erythromycin**, tetracycline, clindamycin, or mecloxycline); 1-30 % of non-water soln. non-**hydrogel**-forming polymeric compsn. (ethylcellulose esters of poly(methylvinylether/ maleic acid)polymers or polyvinylpyrrolidone/hexadecene copolymers); 0.5-40% penetration enhancing plasticizer (peppermint oil, geranyl acetate, geraniol, . . . p-anisaldehyde, carvyl acetate, methyl acetate or cinnamyl alcohol; 50-95% solvent to dissolve polymer and plasticizer.

Pref. compsn. has 2% **erythromycin** base; 10 % geraniol; 10 % copolymer and 80% 200 proof ethanol.

ADVANTAGE - Compsn. with antibacterial penetrates the. . .

L13 ANSWER 47 OF 59 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 6
AN 1988:101241 CAPLUS
DN 108:101241
TI Rheological studies in the development of antibiotic hydrogels based on cellulose ethers
AU Kagan, E. Z.; Sinitsyna, N. I.
CS All-Union Res. Inst. Antibiot., Moscow, USSR
SO Antibiotiki i Meditsinskaya Biotekhnologiya (1988), 33(1), 40-2
CODEN: AMBIEH; ISSN: 0233-7525
DT Journal
LA Russian
AB The physicochem. and rheol. properties and stability of various antibiotics in cellulose **hydrogels** were studied in order to develop a new dosage form. Among 8 antibiotics studied, only **erythromycin** and fusidic acid showed good properties and stability for up to 1 y when incorporated in Me or CM-cellulose **hydrogels**.
AB The physicochem. and rheol. properties and stability of various antibiotics in cellulose **hydrogels** were studied in order to develop a new dosage form. Among 8 antibiotics studied, only **erythromycin** and fusidic acid showed good properties and stability for up to 1 y when incorporated in Me or CM-cellulose **hydrogels**.
IT 114-07-8, **Erythromycin** 6990-06-3, Fusidic acid
RL: BIOL (Biological study)
(cellulose **hydrogels** contg., physicochem. and rheol. properties and stability of)

L13 ANSWER 48 OF 59 CAPLUS COPYRIGHT 2003 ACS
AN 1987:583618 CAPLUS
DN 107:183618
TI Sustained-release hydrogels containing amino acid functionalized units for ophthalmic or other use
IN Bawa, Rajan
PA Bausch and Lomb Inc., USA
SO Eur. Pat. Appl., 34 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 219208	A2	19870422	EP 1986-306348	19860815
	EP 219208	A3	19880601		
	EP 219208	B1	19920624		
	R: BE, CH, DE, FR, GB, IT, LI, NL, SE				
	US 4668506	A	19870526	US 1985-766741	19850816
	CA 1277236	A1	19901204	CA 1986-515033	19860731
	JP 62103029	A2	19870513	JP 1986-190686	19860815
PRAI	US 1985-766741		19850816		

AB Sustained release hydrogels contain a drug in a polymer composed of acrylates which are hydrophilic, acrylates functionalized by an amino acid, and cross-linking agents. These hydrogels are esp. useful as ophthalmic inserts or medicated contact lenses. Soln. A is prep'd. from 2-hydroxyethyl methacrylate 85.3, isobornyl methacrylate 10, methacryloyl glycine 6, and ethylene glycol dimethacrylate 0.5 g, and benzoin Me ether 0.5 g is added. Soln. B is the same as soln. A except pitocarpine HCl (I) 11.43 g is added. A triple layer contact lens is made by spincasting 9.8 .mu.L soln. A; injecting 29.4 .mu.L soln. B on the resulting polymer, spincasting, and injecting 9.8 .mL soln. A on the resulting 2-layer polymer. The resulting triple-spun contact lens has a polymer-drug layer encapsulated between 2 non-drug polymer layers. This compn. released I into distd. water relatively rapidly for the first .apprx.20 h, and then released the drug at .apprx.0.4 mg/h until .apprx.170 h, when testing was stopped. Soln. A was also polym. and the polymer was soaked in I to give another sustained-release compn., which had similar release characteristics to I-soaked Ocusert-20 after the first .apprx.15 h.

IT 50-02-2, Dexamethasone 50-23-7, Hydrocortisone 50-24-8, Prednisolone 51-34-3, Scopolamine 51-43-4, Epinephrine 51-83-2, Carbachol 54-42-2, Idoxuridine 55-63-0, Nitroglycerine 55-91-4 56-75-7, Chloramphenicol 56-94-0 57-47-6, Eserine 57-62-5, Chlortetracycline 59-42-7, Phenylephrine 60-54-8, Tetracycline 61-33-6, biological studies 79-57-2, Oxytetracycline 83-43-2, Methyl prednisolone 87-00-3, Homatropine 92-13-7, Pilocarpine 114-07-8, **Erythromycin** 124-94-7, Triamcinolone 144-80-9, Sulfacetamide 302-79-4, trans-Retinoic acid 378-44-9, Betamethasone 426-13-1 512-15-2, Cyclopentolate 674-38-4, Bethanechol 807-38-5 1403-66-3, Gentamycin 1404-04-2, Neomycin 1404-26-8, Polymyxin B 1405-87-4, Bacitracin 1405-97-6, Gramicidin 1406-11-7, Polymyxin 2668-66-8, Medrysone 6736-03-4, Phospholine 16110-51-3, Cromolyn 26839-75-8, Timolol 32986-56-4, Tobramycin

RL: BIOL (Biological study)
(ophthalmic sustained released **hydrogel** contg.)

L13 ANSWER 49 OF 59 CAPLUS COPYRIGHT 2003 ACS
AN 1987:541041 CAPLUS
DN 107:141041
TI Rheological studies and development of antibiotic hydrogels
AU Kagan, E. Z.; Sinitsyna, N. I.; Kovacs, I.; Aseva, E. V.; Fishman, V. M.; Zaslavskaya, P. L.
CS All-Union Res. Inst. Antibiot., Moscow, USSR
SO Antibiotiki i Meditsinskaya Biotekhnologiya (1987), 32(8), 588-91
CODEN: AMBIEH; ISSN: 0233-7525
DT Journal
LA Russian
AB In order to develop a **hydrogel** formulation for antibiotics, the changes in rheol. properties of Carbopol 940 by addn. of antibiotics were studied. The rheol. properties of **hydrogels** were dependent on the water solv. of antibiotics and the procedure of their incorporation into the **hydrogel**. The best rheol. properties was obsd. with **hydrogels** contg. antibiotics insol. (**erythromycin**, fusidic acid) or slightly sol. (fusidin) in water. The rheol. properties of **hydrogels** deteriorated on incorporation of antibiotic salts (HCl, sulfates).
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IT 64-75-5 114-07-8, **Erythromycin** 751-94-0 859-18-7
 1405-10-3, Neomycin sulfate 1405-41-0, Gentamycin sulfate 6990-06-3,
 Fusidic acid 54988-04-4
 RL: BIOL (Biological study)
 (hydrogels contg., rheol. of)

L13 ANSWER 50 OF 59 WPIDS (C) 2003 THOMSON DERWENT
 AN 1985-049831 [08] WPIDS
 DNC C1985-021745

TI Topical gel compsn. for treating acne - comprising synergistic mixt. of benzoyl peroxide and erythromycin stabilised with di octyl sodium sulpho-succinate.

DC A96 B05
 IN FOXX, M E; KLEIN, R W
 PA (DERM-N) DERMIC LABS INC
 CYC 1
 PI US 4497794 A 19850205 (198508)* 7p
 ADT US 4497794 A US 1983-455283 19830103
 PRAI US 1975-637613 19751204; US 1977-843007 19771017; US 1980-214124
 19801208; US 1983-455283 19830103
 AB US 4497794 A UPAB: 19930925
 Therapeutic aq. gel compsn. comprises (a) 2.5-15 wt.% of micronised benzoyl peroxide of particle size less than 150 microns; (b) 0.5-5 wt.% of erythromycin or its stearate or glucoheptonate derivs; and (c) 0.1-6 wt.% of dioctyl sodium sulphosuccinate as stabiliser. The amt. of peroxide is one-half to thirty times the wt. of the erythromycin cpd.
 USE - Compsn. is used for the topical treatment of acne. Components (a) and (b) act synergistically on the skin, to inhibit the formation of free fatty acids and reduce the concn. of *Corynebacterium acnes*.
 0/4

ABEQ DE 3124698 UPAB: 19930925
 Alcoholic gel compsn. for topical treatment of acne contains 2-5 wt.% **erythromycin** (cpds.), 1-30 wt.% benzoyl peroxide in particles of less than 150 microns, average 35 microns, and 0.1-6 wt.% dioctyl sodium sulphosuccinate, in a pharmaceutical carrier.
 Pref. the compsn. comprises 2-3 wt.% **erythromycin**, 10 wt.% benzoyl peroxide and 0.1-3 wt.% dioctyl sodium sulphosuccinate.
 USE/ADVANTAGE - The peroxide inhibits extracellular lipase, reducing the formation of free fatty acids. The **erythromycin** works synergistically, reducing the concn. of *Corynebacterium acnes*, normal anaerobic bacteria that are the source of the lipase. The sulphosuccinate.
 . .

L13 ANSWER 51 OF 59 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 7
 AN 1985:119670 CAPLUS
 DN 102:119670
 TI Antiacne ointment containing erythromycin propionate
 IN Suci, Gheorghe; Ilea, Laurentia; Ban, Ion; Chiorean, Vasile; Maier, Nicolae Sabin
 PA Institutul de Medicina si Farmacie, Rom.
 SO Rom., 2 pp.
 CODEN: RUXXA3
 DT Patent
 LA Romanian
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI RO 83315	B	19840221	RO 1982-106490	19820201
PRAI RO 1982-106490		19820201		
AB	An antiacne ointment, intended for treatment of polymorphous juvenile acne as well as other forms of acne comprises erythromycin propionate (I) [134-36-1], camphor [76-22-2], ZnO, romazulane (a soln. of chamomile ext., Chamomilla oil, azulene [275-51-4] and Tween), and a			

hydrogel base (10% Na CM-cellulose-triethanolamine 70:30) in a ratio of 1:1:10:6:82 by wt. The hydrogel is prep'd. 1st, I is homogenized with camphor, ZnO is added gradually, and romazulan is then added to the mixt., and the paste obtained is added to the base. The antibiotic activity in the ointment was 90% after 12 mo storage.

AB An antiacne ointment, intended for treatment of polymorphous juvenile acne as well as other forms of acne comprises erythromycin propionate (I) [134-36-1], camphor [76-22-2], ZnO, romazulan (a soln. of chamomile ext., Chamomilla oil, azulene [275-51-4] and Tween), and a hydrogel base (10% Na CM-cellulose-triethanolamine 70:30) in a ratio of 1:1:10:6:82 by wt. The hydrogel is prep'd. 1st, I is homogenized with camphor, ZnO is added gradually, and romazulan is then added to the mixt., and the paste obtained is added to the base. The antibiotic activity in the ointment was 90% after 12 mo storage.

L13 ANSWER 52 OF 59 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 8
AN 1984:56786 CAPLUS
DN 100:56786
TI In vivo evaluation of ocular inserts of hydrogel impregnated with antibiotics for trachoma therapy
AU Hosaka, Shuntaro; Ozawa, Hitoshi; Tanzawa, Hiroshi; Kunitomo, Tetsunosuke; Nichols, Roger L.
CS Basic Res. Lab., Toray Ind. Inc., Kamakura, Japan
SO Biomaterials (1983), 4(4), 243-8
CODEN: BIMADU; ISSN: 0142-9612
DT Journal
LA English
AB Sustained release of antibiotics from hydrogel matrices in the eye was studied for developing a new method for trachoma therapy. Copolymers of N-vinylpyrrolidone were molded into an ocular insert and impregnated with erythromycin [114-07-8] or erythromycin estolate [3521-62-8]. The antibiotic-hydrogel inserts completely suppressed the chlamydia trachomatis infection in the owl monkey eyes. The drug elution rates were a little lower in vivo than in vitro. By comparison of the drug elution rate in the human eye with that in the owl monkey eye, similar therapeutic effect is expected in the treatment of human trachoma.
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IT 114-07-8 3521-62-8
RL: PROC (Process)
(sustained release of, from hydrogel polymer ocular inserts, for trachoma disease treatment)

L13 ANSWER 53 OF 59 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 9
AN 1983:563952 CAPLUS
DN 99:163952
TI Ocular inserts for controlled release of antibiotics
AU Ozawa, Hitoshi; Hosaka, Shuntaro; Kunitomo, Tetsunosuke; Tanzawa, Hiroshi
CS Basic Res. Lab., Toray Ind. Inc., Kamakura, 248, Japan
SO Biomaterials (1983), 4(3), 170-4
CODEN: BIMADU; ISSN: 0142-9612
DT Journal
LA English
AB Ocular inserts impregnated with erythromycin (I) [

114-07-8] and **erythromycin** estolate (II) [3521-62-8] which have sustained release characteristics were prep'd., mainly for the purpose of trachoma therapy. In vitro expts. showed that the elution rate of a drug with low solv. in water (II) is const. when the water content of the **hydrogel** insert is >30%. In the case of a drug with higher solv. (I), the elution rate depends on the water content. Some in vivo expts. using rabbit eyes are also reported.

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L13 ANSWER 54 OF 59 CAPLUS COPYRIGHT 2003 ACS

AN 1984:73895 CAPLUS

DN 100:73895

TI Study of some antiacne ointments with erythromycin lactobionate

AU Suciu, G.; Ilea, Laurentia; Ban, I.; Chiorean, V.; Maier, N.

CS Clin. Dermatol., Fac. Farm., Cluj-Napoca, Rom.

SO Farmacia (Bucharest, Romania) (1983), 31(2), 93-100

CODEN: FRMBAZ; ISSN: 0014-8237

DT Journal

LA Romanian

AB Five antiacne ointment formulations of 1% **erythromycin** lactobionate (I) [3847-29-8] in ointment bases contg. **hydrogels** of Me cellulose [9004-67-5], Na CM-cellulose [9004-32-4], pectin [9000-69-5], and PEG 400 [25322-68-3] and 4000 together with Tween 80, cetylstearyl alc., triethanolamine, etc., were evaluated for release of I from them and antimicrob. activity as affected by storage and temp. I was released at 92-100% from all 5 ointment bases, being released 100% from the base contg. PEG, Me cellulose, and pectin. Antibiotic activity of I from ointments kept for 5-6 mo at 4.degree. was 90-100% and at room temp. 82-100%. Ointments kept at room temp. are effective for 3-4 mo. All ointments showed good rheol. properties.

AB Five antiacne ointment formulations of 1% **erythromycin** lactobionate (I) [3847-29-8] in ointment bases contg. **hydrogels** of Me cellulose [9004-67-5], Na CM-cellulose [9004-32-4], pectin [9000-69-5], and PEG 400 [25322-68-3] and 4000 together with Tween 80, cetylstearyl alc., triethanolamine, etc., were evaluated for release of I from them and antimicrob. activity as affected by storage and temp. I was released at 92-100% from all 5 ointment bases, being released 100% from the base contg. PEG, Me cellulose, and pectin. Antibiotic activity of I from ointments kept for 5-6 mo at 4.degree. was 90-100% and at room temp. 82-100%. Ointments kept at room temp. are effective for 3-4 mo. All ointments showed good rheol. properties.

L13 ANSWER 55 OF 59 WPIDS (C) 2003 THOMSON DERWENT

AN 1982-48599E [24] WPIDS

TI Topical compsn. for treatment of acne - contains erythromycin and organic acid peroxide.

DC A96 B05 D21

IN FOXX, M E; KLEIN, R W

PA (RORE) RORER INT OVERSEAS INC

CYC 2

PI GB 2088717 A 19820616 (198224)* 10p

GB 2088717 B 19841212 (198450)

DE 3124698 C 19920625 (199226) 6p

ADT GB 2088717 A GB 1981-36777 19811207; DE 3124698 C DE 1981-3124698 19810624

PRAI US 1980-214124 19801208

AB GB 2088717 A UPAB: 19930915

Compsn. for topical treatment of acne comprises (1) micronised organic acid peroxide (I) and (2) erythromycin, or its deriv. (II) at wt. ratio (I) : (II) of 0.5-30:1. Esp. (I) is benzoyl peroxide or lauroyl peroxide at 1-30 (5-10) wt.%.

(II) is esp. erythromycin itself or its stearate or glucoheptonate, at 0.5-5 wt.% with (I) : (II) wt. ratio 1-5:1. The compsn. is formulated with usual diluents or carriers as a powder, cream, ointment, suspension or soln. Also new are 2-part compsns. or packages; one contg. (II) and opt. a solvent, and the other contains (I) and any other components.

(I) and (II) show a synergistic effect; (I) inactivates lipase while (II) inhibits the lipase-prod. bacterium *Corynebacterium acne*.

ABEQ. . .
of acne, which composition comprises, as active ingredients, a peroxide of an organic acid in a micronised form and an **erythromycin** compound which is **erythromycin** or a derivative thereof, the peroxide being present in an amount of from one-half to thirty times by weight of the **erythromycin** compound.

ABEQ DE 3124698 UPAB: 19930915

Alcoholic gel compsn. for topical treatment of acne contains 2-5 wt.% **erythromycin** (cpds.), 1-30 wt.% benzoyl peroxide in particles of less than 150 microns, average 35 microns, and 0.1-6 wt.% dioctyl sodium sulphosuccinate, in a pharmaceutical carrier.

Pref. the compsn. comprises 2-3 wt.% **erythromycin**, 10 wt.% benzoyl peroxide and 0.1-3 wt.% dioctyl sodium sulphosuccinate.

USE/ADVANTAGE - The peroxide inhibits extracellular lipase, reducing the formation of free fatty acids. The **erythromycin** works synergistically, reducing the concn. of *Corynebacterium acnes*, normal anaerobic bacteria that are the source of the lipase. The sulphosuccinate.

L13 ANSWER 56 OF 59 CAPLUS COPYRIGHT 2003 ACS

AN 1982:411768 CAPLUS

DN 97:11768

TI Sustained release system using synthetic hydrogels as matrices

AU Hosaka, Shuntaro; Tanzawa, Hiroshi; Ozawa, Hitoshi; Murao, Yasuo; Kunitomo, Tetsunosuke

CS Basic Res. Lab., Toray Ind., Inc., Kamakura, 248, Japan

SO Kobunshi Ronbunshu (1982), 39(4), 277-84

CODEN: KBRBA3; ISSN: 0386-2186

DT Journal

LA Japanese

AB Copolymers of N-vinylpyrrolidone with other vinyl monomers, crosslinked with triethylene glycol dimethacrylate as a crosslinker, were synthesized and evaluated as matrices for drug sustained release system for **erythromycin** [114-07-8] or **erythromycin** estolate [3521-62-8]. In in vitro expts., the elution rate of antibiotics was easily controlled by adjusting the water content of hydrogel matrices, since it was inversely proportional to the square root of the elution time if boundary layer effects were neglected. For **erythromycin** estolate, which is less sol. than **erythromycin**, boundary layer effects were obsd. unless the elution medium was adequately agitated, and the elution rate was kept at a low level. The elution patterns of these antibiotics obsd. in vitro were approx. reproduced in most expts. using animal (guinea pig, rabbit and owl monkey) and human (volunteer) eyes.

AB Copolymers of N-vinylpyrrolidone with other vinyl monomers, crosslinked with triethylene glycol dimethacrylate as a crosslinker, were synthesized and evaluated as matrices for drug sustained release system for **erythromycin** [114-07-8] or **erythromycin** estolate [3521-62-8]. In in vitro expts., the elution rate of antibiotics was easily controlled by adjusting the water content of hydrogel matrices, since it was inversely proportional to the square root of the elution time if boundary layer effects were neglected.

For **erythromycin** estolate, which is less sol. than **erythromycin**, boundary layer effects were obsd. unless the elution medium was adequately agitated, and the elution rate was kept at a low level. The elution patterns of these antibiotics obsd. in vitro were approx. reproduced in most expts. using animal (guinea pig, rabbit and owl monkey) and human (volunteer) eyes.

IT Eye, metabolism
(**erythromycin** absorption by, from vinylpyrrolidone-vinyl copolymer **hydrogel** matrices)

IT 109-16-0D, polymers with vinylpyrrolidone and vinyl monomers
RL: BIOL (Biological study)
(crosslinked, **erythromycin** sustained released from **hydrogel** matrices of)

IT 114-07-8 3521-62-8
RL: PROC (Process)
(sustained-release of, from N-vinylpyrrolidone-vinyl copolymer **hydrogel** matrices)

L13 ANSWER 57 OF 59 WPIDS (C) 2003 THOMSON DERWENT
AN 1981-81687D [45] WPIDS
TI Compsns. for acne treatment - contg. acyl peroxide and erythromycin.
DC A96 B05 D21
IN FOXX, M E; KLEIN, R W
PA (RORE) RORER INT OVERSEAS INC
CYC 14
PI BE 889327 A 19811016 (198145)* 23p
GB 2090135 A 19820707 (198227)
DE 3124698 A 19820708 (198228)
FR 2495471 A 19820611 (198230)
JP 57099525 A 19820621 (198230)
NL 8102997 A 19820701 (198230)
SE 8103925 A 19820719 (198231)
DK 8102739 A 19820719 (198232)
ZA 8104215 A 19821222 (198312)
ZA 8205685 A 19821222 (198313)
CA 1179599 A 19841218 (198504)
CH 647147 A 19850115 (198509)
AT 8102855 A 19860315 (198614)
CH 656307 A 19860630 (198630)
US 4692329 A 19870908 (198738)
IT 1210608 B 19890914 (199144)
DE 3124698 C 19920625 (199226) 6p
ADT US 4692329 A US 1984-627351 19840703; DE 3124698 C DE 1981-3124698
19810624
PRAI US 1975-637613 19751204; US 1977-843007 19771017; US 1980-214124
19801208; US 1983-455283 19830103; US 1984-627351 19840703
AB BE 889327 A UPAB: 19930915
Compsns. for topical treatment of acne contain an organic acyl peroxide (I) and an erythromycin cpd. (II) comprising erythromycin (IIa) or its stearate or glucoheptonate. The (I): (II) wt. ratio is 0.5-30:1.
(I) is pref. benzoyl peroxide (Ia) or aluroyl peroxide, esp. micronised (Ia), and (II) is pref. (IIa). The compsns. are pref. formulated as gels comprising 1-30 wt.% micronised (Ia) with an ave. particle size of less than 35 microns, 2.0-5.0 wt.% (I), 0.1 -6.0 wt.% Na dioctyl sulphosuccinate (III), 1.0-6.0 wt.% of another wetting agent, 0.5-15 wt.% of a gelling agent, 10-80 wt.% of a lower alkanol, and water to 100%. The gelling agent is pref. colloidal Mg aluminosilicate, hydroxypropyl methyl cellulose, microcrystalline cellulose or a hydroxylated vinyl polymer.
Combinations of (I) and (II) act synergistically, (I) inhibiting fatty acid formation by extracellular lipase inactivation and (II) controlling the concn. of *Corynebacterium acnes*.

ABEQ . . .

comprises (a) 2.5-15% by wt. of micronised benzoyl peroxide having particle size below 150 microns; and (b) 0.5-5% of an **erythromycin** cpd. selected from **erythromycin** and its stearate and glucoheptonate derivs.

The amt. of (a) is 0.5-30 times the wt. of (b). Pref. the. . .

ABEQ DE 3124698 UPAB: 19930915

Alcoholic gel compsn. for topical treatment of acne contains 2-5 wt.% **erythromycin** (cpds.), 1-30 wt.% benzoyl peroxide in particles of less than 150 microns, average 35 microns, and 0.1-6 wt.% dioctyl sodium sulphosuccinate, in a pharmaceutical carrier.

Pref. the compsn. comprises 2-3 wt.% **erythromycin**, 10 wt.% benzoyl peroxide and 0.1-3 wt.% dioctyl sodium sulphosuccinate.

USE/ADVANTAGE - The peroxide inhibits extracellular lipase, reducing the formation of free fatty acids. The **erythromycin** works synergistically, reducing the concn. of *Corynebacterium acnes*, normal anaerobic bacteria that are the source of the lipase. The sulphosuccinate. . .

L13 ANSWER 58 OF 59 CAPLUS COPYRIGHT 2003 ACS
AN 1979:210058 CAPLUS
DN 90:210058
TI Controlled release of drugs from hydrogel matrixes
AU Hosaka, Shuntaro; Ozawa, Hitoshi; Tanzawa, Hiroshi
CS Basic Res. Lab., Toray Ind. Inc., Kamakura, Japan
SO Journal of Applied Polymer Science (1979), 23(7), 2089-98
CODEN: JAPNAB; ISSN: 0021-8995
DT Journal
LA English
AB A series of polymers with wide ranges of water absorptivity were prep'd. and utilized as matrices for the controlled release of drugs. The drugs were introduced into the matrices by use of an appropriate org. solvent. Release rates of **erythromycin** (I) [114-07-8] and I estolate [3521-62-8] from **hydrogel** were analyzed kinetically and conformed with Higuchi's equation $M_t = A(2DtCsCo)^{1/2}$, where M_t is the accumulated amt. of released drug at time t , A is the surface area, D is the diffusion coeff., C_s is the solv. of drug in the **hydrogel** matrix, and C_0 is the initial drug content of the prepn. in the swollen state. The relation between the water content of **hydrogel** and the diffusion coeff. of **erythromycin** in **hydrogel** is expressed by the equation $D = 3.03 \cdot \text{times. } 10-10 W^{3.03}$ (cm²/s), where W is the water content (%). The release rate of drug can be controlled quant. by adjustment of the water content of the **hydrogel** matrix. A guide to the design for the prepn. is suggested.
AB A series of polymers with wide ranges of water absorptivity were prep'd. and utilized as matrices for the controlled release of drugs. The drugs were introduced into the matrices by use of an appropriate org. solvent. Release rates of **erythromycin** (I) [114-07-8] and I estolate [3521-62-8] from **hydrogel** were analyzed kinetically and conformed with Higuchi's equation $M_t = A(2DtCsCo)^{1/2}$, where M_t is the accumulated amt. of released drug at time t , A is the surface area, D is the diffusion coeff., C_s is the solv. of drug in the **hydrogel** matrix, and C_0 is the initial drug content of the prepn. in the swollen state. The relation between the water content of **hydrogel** and the diffusion coeff. of **erythromycin** in **hydrogel** is expressed by the equation $D = 3.03 \cdot \text{times. } 10-10 W^{3.03}$ (cm²/s), where W is the water content (%). The release rate of drug can be controlled quant. by adjustment of the water content of the **hydrogel** matrix. A guide to the design for the prepn. is suggested.
L13 ANSWER 59 OF 59 CAPLUS COPYRIGHT 2003 ACS
AN 1977:145841 CAPLUS
DN 86:145841
TI The effect of preservative on the stability and release of antibiotics

from hydrogels

AU Popovici, Adriana; Rogosca, Maria; Peter, M.; Voloc, N.

CS Inst. Med.-Farm., Tirgu Mures, Rom.

SO Farmacia (Bucharest, Romania) (1976), 24(4), 203-10

CODEN: FRMBAZ; ISSN: 0014-8237

DT Journal

LA Romanian

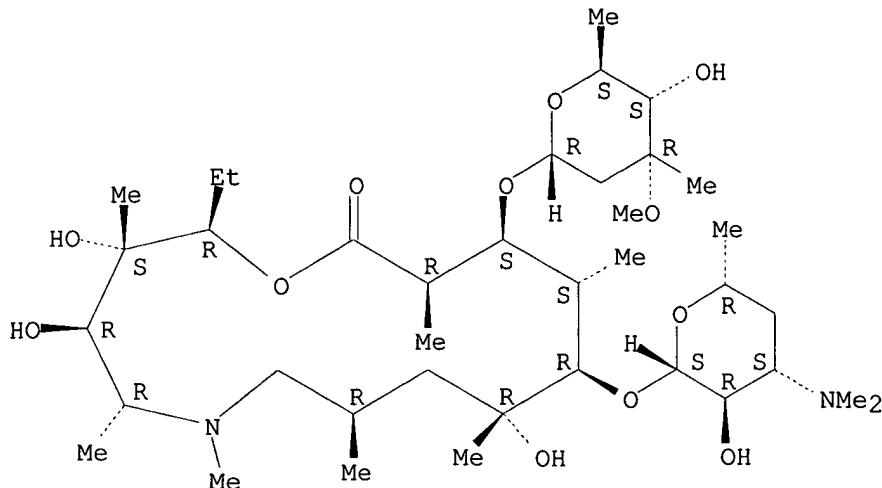
AB Tetracycline [60-54-8], chloramphenicol [56-75-7], **erythromycin** lactobionate [3847-29-8], and neomycin sulfate [1405-10-3] were incorporated into various **hydrogel** ointment bases, followed by in vitro microbiol. detn. of the release of the antibiotics, using *Staphylococcus aureus*. A high degree of release was obsd. from Na alginate [9005-38-3], poly(vinyl alc.) [9002-89-5] and Aerosil [7631-86-9], and a moderate degree from methyl cellulose [9004-67-5] and carboxymethylcellulose [9004-32-4]. Bentonite inhibited the release of the antibiotics. Tetracycline and chloramphenicol showed undiminished antibiotic activity in cellulose derivs. and in poly(vinyl alc.) for 8 months. Neomycin showed little degrdn. in poly(vinyl alc.). Erythromycin showed poor stability in all the **hydrogels** studied. The preservative phenyl mercury borate [102-98-7], but not sorbic acid [110-44-1] had a bacteriostatic activity. Both preservatives, but esp. phenyl mercury borate, modified the release and stability of the antibiotics.

AB Tetracycline [60-54-8], chloramphenicol [56-75-7], **erythromycin** lactobionate [3847-29-8], and neomycin sulfate [1405-10-3] were incorporated into various **hydrogel** ointment bases, followed by in vitro microbiol. detn. of the release of the antibiotics, using *Staphylococcus aureus*. A high degree of release was obsd. from Na alginate [9005-38-3], poly(vinyl alc.) [9002-89-5] and Aerosil [7631-86-9], and a moderate degree from methyl cellulose [9004-67-5] and carboxymethylcellulose [9004-32-4]. Bentonite inhibited the release of the antibiotics. Tetracycline and chloramphenicol showed undiminished antibiotic activity in cellulose derivs. and in poly(vinyl alc.) for 8 months. Neomycin showed little degrdn. in poly(vinyl alc.). Erythromycin showed poor stability in all the **hydrogels** studied. The preservative phenyl mercury borate [102-98-7], but not sorbic acid [110-44-1] had a bacteriostatic activity. Both preservatives, but esp. phenyl mercury borate, modified the release and stability of the antibiotics.

Some macrolides
(includes all specifically claimed ones).

L5 ANSWER 1 OF 4 REGISTRY COPYRIGHT 2003 ACS
RN 83905-01-5 REGISTRY
CN 1-Oxa-6-azacyclopentadecan-15-one, 13-[(2,6-dideoxy-3-C-methyl-3-O-methyl-.alpha.-L-ribo-hexopyranosyl)oxy]-2-ethyl-3,4,10-trihydroxy-3,5,6,8,10,12,14-heptamethyl-11-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, (2R,3S,4R,5R,8R,10R,11R,12S,13S,14R)- (9CI)
(CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1-Oxa-6-azacyclopentadecan-15-one, 13-[(2,6-dideoxy-3-C-methyl-3-O-methyl-.alpha.-L-ribo-hexopyranosyl)oxy]-2-ethyl-3,4,10-trihydroxy-3,5,6,8,10,12,14-heptamethyl-11-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, [2R-(2R*,3S*,4R*,5R*,8R*,10R*,11R*,12S*,13S*,14R*)]-
OTHER NAMES:
CN 9-Deoxo-9a-methyl-9a-aza-9a-homoerythromycin A
CN Aruzilina
CN Arzomicin
CN Azadose
CN Azenil
CN Azimin
CN Azithral
CN **Azithromycin**
CN Azitrocin
CN Azitromax
CN Aziwok
CN Azomycin
CN Azomycin (macrolide)
CN Aztrin
CN CP 62993
CN N-Methyl-11-aza-10-deoxo-10-dihydroerythromycin A
CN Setron
CN Sumamed
CN Tobil
CN Tromix
CN Trozocina
CN Ultreon
CN XZ 405
CN XZ 450
CN Zeto
CN Zifin
CN Zistic
CN Zithromac
CN Zithromax
CN Zitrim
CN Zitromax
FS STEREOSEARCH
DR 104491-80-7, 142556-82-9
MF C38 H72 N2 O12
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CIN, CSCHEM, CSNB, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, IPA, MEDLINE, MRCK*, PHAR, PHARMASEARCH, PROMT, RTECS*, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: WHO

Absolute stereochemistry.



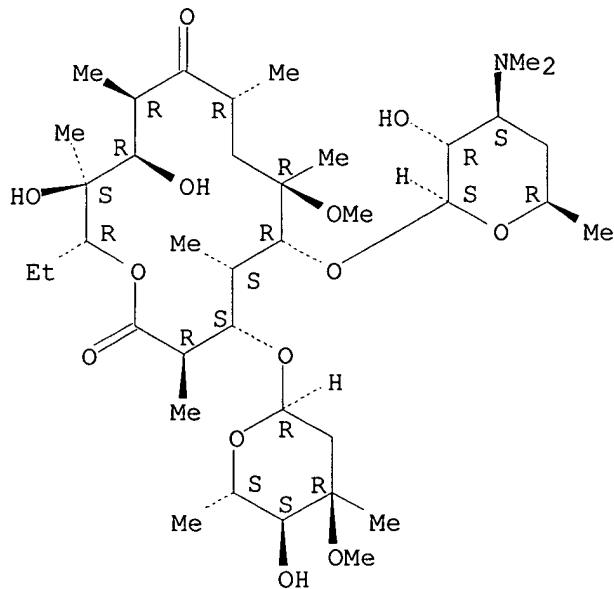
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1744 REFERENCES IN FILE CA (1962 TO DATE)
 20 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 1751 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L5 ANSWER 2 OF 4 REGISTRY COPYRIGHT 2003 ACS
 RN 81103-11-9 REGISTRY
 CN Erythromycin, 6-O-methyl- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Oxacyclotetradecane, erythromycin deriv.
 OTHER NAMES:
 CN 6-O-Methylerythromycin
 CN 6-O-Methylerythromycin A
 CN A 56268
 CN Abbott 56268
 CN Antibiotic A 56268
 CN Antibiotic TE 31
 CN Biaxin
 CN Clamicin
 CN **Clarithromycin**
 CN Clathromycin
 CN Fromilid
 CN Kelamycin
 CN Klacid
 CN Klaricid
 CN Macladin
 CN Naxy
 CN TE 031
 CN Veclam
 CN Zeclar
 FS STEREOSEARCH
 DR 108599-07-1
 MF C38 H69 N O13
 CI COM
 LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*,
 BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAPLUS, CASREACT,
 CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES, DRUGNL,
 DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, IPA, MEDLINE, MRCK*, PHAR,
 PHARMASEARCH, PROMT, RTECS*, SYNTHLINE, TOXCENTER, ULIDAT, USAN, USPAT2,
 USPATFULL, VETU
 (*File contains numerically searchable property data)

Other Sources: WHO

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2519 REFERENCES IN FILE CA (1962 TO DATE)
21 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2527 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L5 ANSWER 3 OF 4 REGISTRY COPYRIGHT 2003 ACS

RN 80214-83-1 REGISTRY

CN Erythromycin, 9-[O-[(2-methoxyethoxy)methyl]oxime], (9E)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Oxacyclotetradecane, erythromycin deriv.

OTHER NAMES:

CN Assoral

CN Claramid

CN Forilin

CN Overal

CN Rossitrol

CN Rotramin

CN **Roxithromycin**

CN Roxithromycin A

CN RU 28965

CN RU 965

CN Rulid

CN Surlid

FS STEREOSEARCH

DR 102483-87-4

MF C41 H76 N2 O15

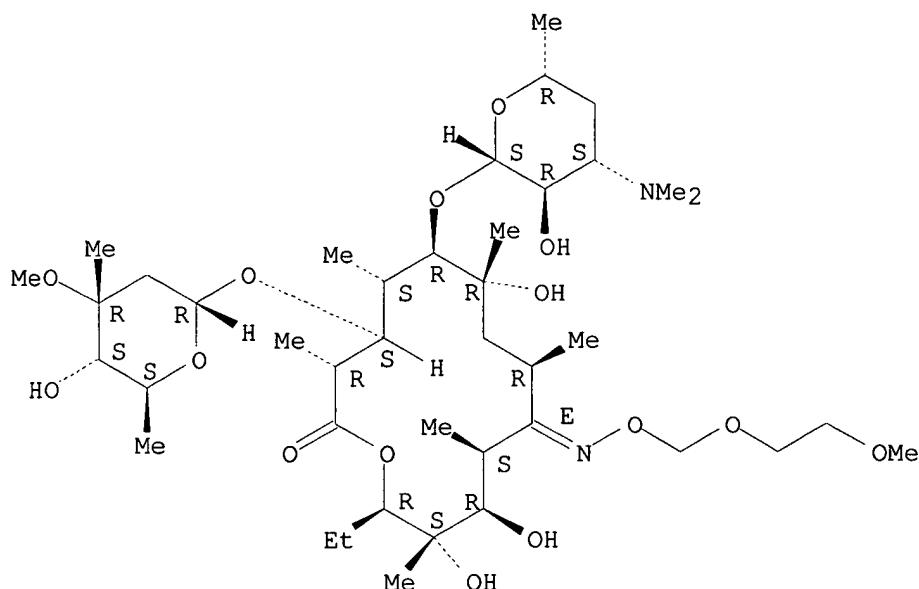
CI COM

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CIN, DDFU, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, IPA, MEDLINE, MRCK*, PHAR, PHARMASEARCH, PROMT, RTECS*, SYNTHLINE, TOXCENTER, ULIDAT, USAN, USPAT2, USPATFULL, VETU

(*File contains numerically searchable property data)

Other Sources: WHO

Absolute stereochemistry.
Double bond geometry as shown.



912 REFERENCES IN FILE CA (1962 TO DATE)
4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
913 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L5 ANSWER 4 OF 4 REGISTRY COPYRIGHT 2003 ACS

RN 114-07-8 REGISTRY

CN **Erythromycin (8CI, 9CI)** (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Erythromycin A (7CI)

CN Oxacyclotetradecane, erythromycin deriv.

OTHER NAMES:

CN Abbotycin

CN Abomacetin

CN Ak-Mycin

CN Aknin

CN Dotycin

CN E-Base

CN E-Mycin

CN Emgel

CN EMU

CN Ermycin

CN ERYC

CN Erycen

CN Erycette

CN Erycin

CN Erycinum

CN EryDerm

CN Erygel

CN Erymax

CN Erytab

CN Erythro

CN Erythrocin

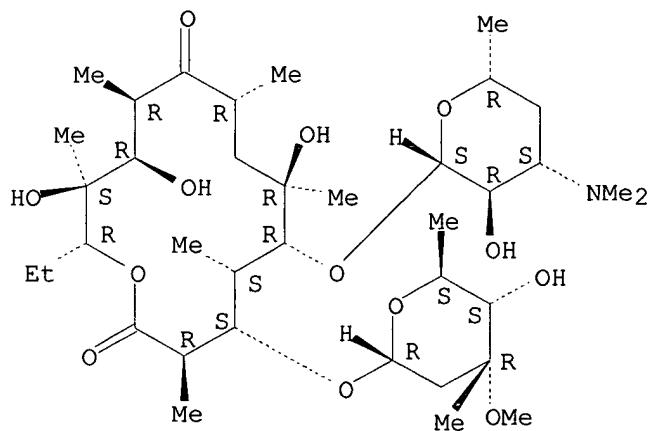
CN Erythrograman

CN Erythromast 36

CN Erythromid

CN Ilotycin
 CN Inderm
 CN Oxacyclotetradecane-2,10-dione, 4-[(2,6-dideoxy-3-C-methyl-3-O-methyl-.alpha.-L-ribo-hexopyranosyl)oxy]-14-ethyl-7,12,13-trihydroxy-3,5,7,9,11,13-hexamethyl-6-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, [3R-(3R*,4S*,5S*,6R*,7R*,9R*,11R*,12R*,13S*,14R*)]-
 CN Pantomicina
 CN PCE
 CN Retcin
 CN Staticin
 CN Stiemycin
 CN T-Stat
 CN Theramycin Z
 CN Torlamicina
 CN [3R-(3R*,4S*,5S*,6R*,7R*,9R*,11R*,12R*,13S*,14R*)]-4-[(2,6-Dideoxy-3-C-methyl-3-O-methyl-.alpha.-L-ribo-hexopyranosyl)oxy]-14-ethyl-7,12,13-trihydroxy-3,5,7,9,11,13-hexamethyl-6-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]oxacyclotetradecane-2,10-dione
 FS STEREOSEARCH
 DR 7540-22-9, 50976-86-8, 47879-92-5, 47879-97-0, 47880-49-9, 374700-25-1
 MF C37 H67 N O13
 CI COM
 LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DIOGENES, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PHAR, PHARMASEARCH, PIRA, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, ULIDAT, USAN, USPAT2, USPATFULL, VETU
 (*File contains numerically searchable property data)
 Other Sources: DSL**, EINECS**, WHO
 (**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry. Rotation (-).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

9400 REFERENCES IN FILE CA (1962 TO DATE)
215 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
9411 REFERENCES IN FILE CAPLUS (1962 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

AN 1984:73895 CAPLUS
DN 100:73895
TI Study of some antiacne ointments with erythromycin lactobionate
AU Suciu, G.; Ilea, Laurentia; Ban, I.; Chiorean, V.; Maier, N.
CS Clin. Dermatol., Fac. Farm., Cluj-Napoca, Rom.
SO Farmacia (Bucharest, Romania) (1983), 31(2), 93-100
CODEN: FRMBAZ; ISSN: 0014-8237
DT Journal
LA Romanian
AB Five antiacne ointment formulations of 1% erythromycin lactobionate (I) [3847-29-8] in ointment bases contg. hydrogels of Me cellulose [9004-67-5], Na CM-cellulose [9004-32-4], pectin [9000-69-5], and PEG 400 [25322-68-3] and 4000 together with Tween 80, cetylstearyl alc., triethanolamine, etc., were evaluated for release of I from them and antimicrobiol activity as affected by storage and temp. I was released at 92-100% from all 5 ointment bases, being released 100% from the base contg. PEG, Me cellulose, and pectin. Antibiotic activity of I from ointments kept for 5-6 mo at 4.degree. was 90-100% and at room temp. 82-100%. Ointments kept at room temp. are effective for 3-4 mo. All ointments showed good rheol. properties.